Joint commission on Kentucky and ... line, 1860.

REPORT

OF THE

COMMISSIONERS APPOINTED TO MARK

THE BOUNDARY LINE

BETWEEN THE

STATES OF KENTUCKY AND TENNESSEE,

TO THE GOVERNOR OF KENTUCKY.

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1860.

REPORT

OF THE

BOUNDARY LINE COMMISSIONERS

OF

KENTUCKY AND TENNESSEE.

To the Hon. B. MAGOFFIN, *Governor of Kentucky:*

Under the provisions of an act passed by the General Assembly of Tennessee, at their October session, 1857, and another passed by the General Assembly of Kentucky, at their December session of the same year, we were appointed by the proper authorities of the two States, commissioners to fix and establish, have run and remarked, the line of boundary separating them; and having executed the work assigned us, beg leave respectfully to report:

The first article of the compact between the two States reads in these words: "The line of boundary and separation between the States of Kentucky and Tennessee shall be as follows, to-wit: The line run by the Virginia commissioners in 1779–80, commonly called Walker's line, as the same is reputed, understood, and acted upon by the said States, their respective authorities and citizens, from the southeastern corner of Kentucky to the Tennessee river; thence up the said river to the point where the line of Alexander and Munsell, run by them the last year, would leave said river; and then with the line of Alexander and Munsell to the termination thereof, on the Mississppi river, near to and below New Madrid."

The laws under which we are acting required that we should begin our line on the Mississipi river, and run eastward. It may be proper for us, therefore, in the first place, to refer briefly to the one run by Alexander and Munsell in 1819, and by Henderson in 1821, from the Tennessee to the Mississippi river, and to some of the facts presented to us on that portion of it.

The line of Alexander and Munsell was intended, and believed to be, on the parallel of 36° 30′ of north latitude. They ascertained, as they supposed, the proper point on the Tennessee river, and started their surveyors westward; but the point so ascertained was upon the parallel of 36° 29′ 54″, and of course too far south by some 600 feet. They then floated down the Tennessee, Ohio, and Mississippi rivers to a point something over two miles above the head of island No. 10; had there determined the parallel of latitude again, and long and anxiously been waiting the arrival of their surveyors. They, in their westward course, had tended northward so much that when they reached the Green-timber arm of Reelfoot lake—a distance of some sixty-eight miles—they were north of their starting point about 3,600 feet, and of the latitudinal line about 3,000 feet. They concluded that these arms of the lake, swamps, ponds, and bayous, were impassible—and no wonder. Nothing like them are to be seen in either State, unless it be southwardly; the country was sparsely populated; the Indian title to the lands but recently extinguished by the treaty of Jackson and Shelby, and they about being brought into market. None but old pioneers, or those who always march in advance of civilization, knew anything about it. They went around all these apparent obstructions to the Mississippi river, where the State line going west first crosses it; and here they met the commissioners. The parallel of latitude here determined coincided with ours very nearly. The surveyors were started back, with the view of striking the lake on its western shore opposite to the point where they had been stopped by it on the other; but after running 274 poles, encountering a pond and heavy cane-brake, they again stopped short of the western shore of the lake near three miles, and short of where they had stopped on the other over five. They neither run or marked this portion of the line, but left it as they found it, untouched—not supposing, as we are willing to believe, that they were more than half a mile south of their stopping place on the other side. They then returned to the point just left on the Mississippi river, triangulated around Missouri Bend, so called, to a point in Madrid Bend about one mile below the foot of island No. 10, and then run across said bend to its western side, on the bank of the Mississippi river, at a point on the parallel of 36° 29′ 56″ of north latitude—too far south by some 400 feet. From this point we started

our line eastward, and followed the one run by these commissioners, with exceptions which we will name. They not only tended northward from the Tennessee river to the eastern shore of the Green-timber arm of Reelfoot lake, as a whole, but were making angles almost continually, though very small ones, but to such an extent that, at the end of some 68 miles, they were north of the starting point some 3,600 feet. To run any half mile of their whole line, and then produce it each way for half a mile, neither of the last would have followed the course of the first in more than one or two instances. We endeavored to straighten this line somewhat by making points at each quarter section corner—that is, every half mile nearly—and connecting these points by direct lines. We also run the line across Reelfoot lake, and the swamps, ponds, and bayous adjacent thereto, and marked it all the way—a work never performed before—and we were about four weeks engaged at it. We placed a stone at the end of the 274 poles before named, engraving upon it the course to the stopping point on the eastern shore of the lake, to-wit: "N. 83° 40′ 19′ E."

Henderson, in 1821, run the same line from the Tennessee river to the Green-timber arm of Reelfoot lake, and then produced it to the Mississippi river, on the parallel of 36° 30′ 32″ of north latitude, or 3,200 feet, or thereabouts, north of the true point. This he made his base line in sectionizing the lands south and west of the Tennessee river. Across Madrid Bend he followed the line of Alexander and Munsell precisely.

The laws required us to place stone posts every five miles. The first one would have fallen in the State of Missouri, and of course it was not placed there, but was marked "No. 1—10 miles," and put in the ground 319 feet west of the western shore of the eastage or western arm of Reelfoot lake, ten miles from the starting point on the west side of Madrid Bend. We then had them placed every succeeding five miles, or nearly so—sometimes falling short, and again going over somewhat, in order to get to places where persons would have an opportunity of seeing and knowing where the State line was, instead of placing them precisely five miles apart, in out of the way places, on mountain tops, in deep ravines, or in cultivated fields, where but few, if any, persons would be likely ever to see them. These stones, in number 63, have "Ky." and "Tenn.," their number, and their distance in miles from the starting point, engraved on appropriate sides of each.

We also placed 11 smaller stones at the crossings of rivers, and at obtuse angles on the line. On the Mobile and Ohio railroad—on the turnpike road from Bowling-Green to Nashville, where the black-jack stands, and on the turnpike road from Glasgow to same place—we also placed stones

with suitable inscriptions. We placed a large stone on the bank of the Mississippi river, at the beginning point, engraving on the

West Side.
CHAS. S. MOREHEAD, Gov. Ky.
MASON BROWN, Secretary.

East Side.
J. G. HARRIS, Gov. Tenn.
J. E. R. RAY, Secretary.

North Side.
A. P. COX, C. M. BRIGGS, } Commissioners.
J. PILSBURY, Engineer.
GEO. STEALEY, Ass't Engineer.

South Side.
BEN. PEOPLES, O. R. WATKINS, } Commissioners.
O. H. P. BENNET, Engineer.
G. TRAFTON, Ass't Engineer.

We may as well say in this connection, as elsewhere, that the putting in of the stone posts has cost a large sum of money; much larger than we anticipated when leaving home for the line. There are no stone west of the Tennessee river. We had all of them except two prepared in Bowling-Green, at a cost of $345 21; this was exclusive of the cost arising from members of the corps being compelled to go back to points, more or less distant, according as we had progressed with the survey of the line, to see them placed. We had yet a small and a five mile stone to be put in west of the Tennessee river. Those already put in had been shipped by water to Evansville, and again to Paducah, Columbus, Hickman, and Compromise, and then by railroad or wagons, as best suited us, to the points where wanted. We found that they had been much delayed by contractors, shippers, commission merchants, or wharf-masters; one, more than one, or all, to such an extent, that one of us had to go more than once to hunt them up, and know of their whereabouts, and the causes of their delay. Inasmuch as we were now approaching, and near to a country of limestone, we determined to try another, and we hoped a better plan, of having them prepared and placed in their proper positions. For this purpose we hired a mason, boarded him, and kept him with us; but he could or would do nothing; whether for want of energy or capacity—one or both—or from an absence or scarcity of the right kind of rock, we can't say. It appeared to us, that from the Cumberland river, eastward, stone of every grade might have been found in great abundance. Yet, being poor judges of such things, we may be, and possibly are, mistaken. However, as he professed to be unable to do anything to forward our work, we dismissed him, and then determined, if we could, to get some one to prepare and put them in at his own costs and charges, for a specified sum for each stone. After getting about one hundred miles ahead of our last stone put in, and trying in Nashville and elsewhere to get some one to undertake the whole job, we finally contracted with Mr. S. W. Stanley, of Warren county, Kentucky, to have prepared and placed in their proper positions, all the remainder, at $20 each. This appears a

high price; but when we consider the difficulty of getting these stone at points near or adjacent to their proper places, and the mountainous region through which you have to pass to get to them, and the great expense of doing all this, we may arrive at a different conclusion. We are now stationed a short distance east of Cumberland Gap, in full view of both corners, where almost all that you see except vegetation is stone, and all that you don't see, stone; yet, we have seen Mr. Stanley and two hands work six days in preparing our last stone, then abandon it; try another four days and abandon it; another one day and leave it; another five days and abandon it; he then went across the mountain twelve miles, and has gotten one which will take him six days to prepare and put in the ground. Thus it is seen that it will require twenty-two days to finish this one stone; this, however, is an isolated, extreme case. The wages of his hands, and board of himself and them, will cost over one hundred dollars.

We now come eastward to the line run by Walker and other commissioners; and because some of them have given a very different construction as to the meaning of the first article of the compact quoted in the beginning of this report from ours, we may be excused for saying what ours is, more especially as we have acted in accordance therewith. Bright and Munsell, who run the line in 1830, across the southern borders of Allen, Simpson, and Trigg counties, look upon the article in question as very ambiguous and difficult to be understood; and they enter into a tedious critical examination of the whole to show what must have been intended, or to reconcile the antagonistic features of several of its parts, as though such men as Grundy and Brown, of Tennessee, and Crittenden and Trimble, of Kentucky, could not, in simple language, give expression to their thoughts; and they came to the conclusion that they were only authorized, or rather, that they were compelled to run "Walker's line" when they found it, and when they could not find it, his reputed one; when they could not find either, they have not told us what they would have done.

To us the language of this article is remarkably plain—could not have been made plainer. It is not simply "the line run by the Virginia commissioners in 1779–80," that we were to run; nor the line run by said commissioners, "commonly called Walker's line," but it is said line—not lines—it is the same, as it is "reputed, understood, and acted upon by the said States." We had nothing to do with "the line run by the Virginia commissioners in 1779–80, commonly called Walker's line," unless the same runs over the precise ground that the line "commonly called Walker's line" does, "as the same is reputed, understood, and acted upon by the said States." We had nothing to do with any line but the one "commonly

called Walker's line"—not necessarily as he run it, but "as the same is reputed, understood, and acted upon by the said States, their authorities, and citizens." We had nothing to do with any line but the reputed one. That is made, by the compact, "the line of boundary and separation" between the two States, and we have felt constrained to run it as near as we could. If every portion of it is not run precisely as each desired it should run, yet it is so run as to meet our approval and acquiescence, if not our entire and cordial approbation. There may have been places, and no doubt were, where matters of very small importance would not have been settled as they have been, but for their utter insignificance when impeding the settling of others of much higher import.

They speak of having seen trees, many times, marked by Walker—blocked them, and counted their annulations—and from a perfect coincidence of dates, were satisfied of their being such. They say that his mark was two chops, a blaze, and again two chops, fore and aft. If they ever saw such trees, they destroyed all evidence of their having been such as they described them, by blazing out and destroying all the chops. We saw many trees which appeared to have been so served; but for what conceivable purpose we cannot imagine, unless that all who should follow them would be compelled to rely solely upon what they say, instead of upon nature and nature's God. One solitary mark will show its age as well as a thousand. Millions can add nothing to its verity. The one mark speaks the truth, the whole truth, and nothing but the truth, as Heaven itself speaks it. There is nothing that can add to or subtract from the story it tells. We are satisfied that they never saw a Walker line-tree, or have misstated its characteristics. We have seen many of them, east of the southeast corner of Kentucky, to-wit: the seven pines and two black-oaks, for several miles, and as far westward as he professes to have run this portion of it—that is, to the Clear Fork of Cumberland river—and they were uniformly marked with three chops fore and aft. Westward of the Clear Fork, we have seen but one solitary tree that we felt fully assured was marked by Walker's corps. It was a large beech, more than three feet in diameter, standing on the east bank of the main East Fork of Red river, some mile and a half below the mouth of Whipporwill, on the southern border of Logan county, and marked with a hatchet very narrow in the blade, with three chops, fore and aft. It had a great number of names cut in the bark—the most of which are illegible—and the date "11 March, 1780." On other beech trees near to the large one, we saw the names of "James West, 11th March, 1780," and "Isaac Bledsoe, 11 March, 1780." We suppose that these men were a portion of Walker's corps. All the chops had the appearance of being very ancient, and had doubtless been

made by Walker's party. We did not block any of them, thinking it a shame that every vestige of Walker ever having run the line should be obliterated. We were fully satisfied without doing it, and the beech stands there now, as it did when the surveyors of 1779–80 left it, not seeming to have lost any of its vigor by the lapse of ages. There was also a post-oak standing near the 110 mile-stone, which we caused to be blocked, and were of the impression that it had been marked by Walker's party. The annual growths, however, were so small, the tree so much decayed towards the heart, and the date of the marks so uncertain, that we could not determine anything satisfactory to our own minds in regard thereto. These two are all the trees which we saw west of Cumberland river, at its first crossing, going west, upon which we could place any reliance that they had been marked by Walker or his party. We were fully satisfied in regard to the beech; not so as to the post-oak—which was marked as the beech, three chops fore and aft. After seeing the beech we were more disposed to regard the post-oak as having been marked by Walker, and are now willing to so regard it.

Munsell and Bright run their line by the magnetic instead of the true meridian; took the variation of the needle, so far as we know, or they have informed us, but once, and ran their several lines by the variation then shown, as though it could not or would not change. They run their lines, supposing the variation to have been 6° 45′ east. We have found it to be from 5° 30′ to 8° 00′ on the same ground. How could they but have blundered, running thus? They give neither course or distance in their report; but an examination of their map will show, that after running a few hundred yards, or perhaps a mile or more, and finding themselves off from the line, according to the say-so of some adjacent landholder, from twenty to one hundred and fifty or more feet, they made direct angles to it, and then go on again on their old course; so that it may be said truly, if they were ever on the line of Walker, they did not continue on it a single foot, but diverged from it, northward or southward, immediately after starting. They marked all these lines with two chops, a blaze, and again two chops, fore and aft. We were often in full view of trees thus marked on both sides of us, north and south, twenty or more feet distant.

In 1845, Nance, Wilson, Duncan, and McLean, run three miles across the southern border of Christian county, all that part of Trigg county which lies east of Cumberland river, and all that portion of Fulton county lying west of Reelfoot hills. From these hills westward they ran precisely as Alexander and Munsell had in 1819, and no further—leaving unrun, unmarked, and untouched, something over five miles. We were nearly as long in running eight miles, including this five, as they were out

from home, and running, as they say, thirty. They also ran a new line, connecting the eastern terminus of a line from Lineport out, near three miles, with the western terminus, as they say, of Walker's line, which, if produced, would have crossed Cumberland river near to and below the mouth of Saline creek.

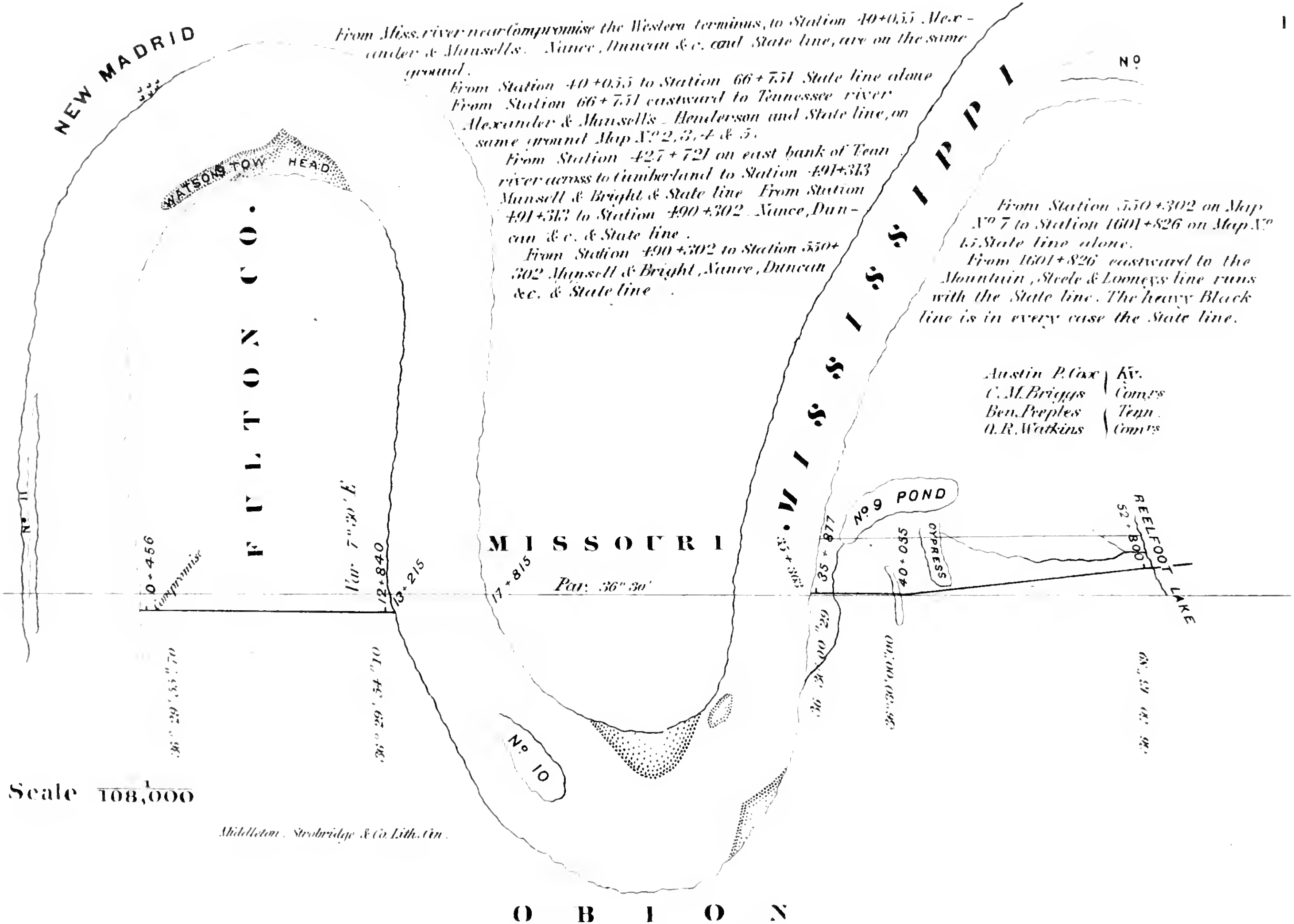
In 1821, Steele and Looney ran the line from the seven pines and two black-oaks, southeastern corner of Kentucky, to the first crossing of Cumberland river going west. They started on the Cumberland mountain, precisely where Walker had crossed it, on the parallel of 36° 34′ 53″.5 of north latitude—more than five and a half miles north of the latitudinal line—and they struck the Cumberland river between the mouth of Kettle creek on the east, and McFarland's creek on the west, on the parallel of 36° 37′ of north latitude, more than eight miles north of the latitudinal line. They make the distance, by measurement, from the southeast corner of Kentucky to Cumberland river, at this point, one hundred and fourteen miles; Walker had made it, by measurement and estimate, one hundred and nineteen; and we now make it only five hundred and sixteen thousand and forty-three feet, or ninety-seven and a half miles, and twelve hundred and forty-three feet. They make the distance from the seven pines and two black-oaks, southeastern corner of Kentucky, to Cumberland Gap, one mile and a half and twelve poles, or eight thousand one hundred and eighteen feet; we make it nine thousand five hundred and ten feet, or one and three fourth miles, sixteen poles, and two yards; they make it from Kettle creek to Cumberland river, two miles, or ten thousand five hundred and sixty feet; we make it one half mile and twenty-six poles, or three thousand and seventy feet. We are fully persuaded that we are as nearly correct as men can reasonably expect to be when measuring through such a country—over hills and mountains, from a few to fifteen hundred or more feet high.

The commissioners of whom we are now speaking ran little or none of this line west of the Clear Fork of Cumberland river; if they did, we have been so unfortunate as to see but few of their marks. The country is mountainous and precipitous, and, directly on the line, not accessible to men on horseback, and scarcely so to young active footmen. There are many consecutive miles without a mark that we could find. Old men who then lived, and now live on it, say that they walked around many miles—five, ten, or more—on the best ground, shown them by pilots, without marking a tree, stretching a chain, or sticking a jacob-staff. They give their distances in miles from one notorious point to another on the line—don't descend to furlongs, poles, yards, or feet—not even to half or quarter miles; and yet the course they ran, and the distances to various objects as

they passed along, are given in the laws of both States as the established boundary between them, and are now obligatory on both, if anything can be found on the ground at all corresponding with what is said on paper.

As we stated before, our line commences on the Mississippi river, on the west side of Madrid bend, some five and a half miles below New Madrid, and then runs as shown by the words and figures which follow, to-wit:

Beginning on the east bank of the Mississippi river, near Compromise, Kentucky, in latitude 36° 29′ 57″.7, and running S. 89° 15′ 18″ E.—passing a large set rock at station 0+456, and passing a small set rock at station 12+840, to station 13+215—the west bank of the Mississippi river Beginning on the east bank of the Mississippi river, at station 35+363, in latitude 36° 30′ 00″.29, and running S. 89° 35′ 15″ E., passing a set rock at station 35+877, to a second set rock at station 40+055; thence N. 83° 40′ 19″ E., passing stone No. 1 at station 52+80,


NEW MADRID
WATSONS TOW HEAD
FULTON CO.
MISSOURI
MISSISSIPPI
OBION
No. 11
No. 10
No. 9 POND
CYPRESS
REELFOOT LAKE
No.
Compromise
Var. 7° 30' E
Par. 36° 30'
0 + 456
12 + 840
13 + 215
17 + 815
35 + 363
35 + 877
40 + 035
52 + 800
36° 29' 55" 70
36° 29' 54" 10
36° 30' 00" 29
36° 30' 00" 00
36° 30' 13" 89
From Miss. river near Compromise the Western terminus, to Station 40+035 Alexander & Mansell's. Nance, Duncan &c. and State line, are on the same ground.
From Station 40+035 to Station 66+751 State line alone
From Station 66+751 eastward to Tennessee river Alexander & Mansell's, Henderson and State line, on same ground Map No. 2, 3, 4 & 5.
From Station 427+721 on east bank of Tenn. river across to Cumberland to Station 491+313 Munsell & Bright & State line. From Station 491+313 to Station 490+302 Nance, Duncan &c. & State line.
From Station 490+302 to Station 550+302 Munsell & Bright, Nance, Duncan &c. & State line.
From Station 550+302 on Map No. 7 to Station 1601+826 on Map No. 15 State line alone.
From 1601+826 eastward to the Mountain, Steele & Looney's line runs with the State line. The heavy Black line is in every case the State line.
Austin P. Cox, C. M. Briggs: Ky. Com'rs
Ben. Peeples, O. R. Watkins: Tenn. Com'rs
Scale 1/108,000
Middleton, Strobridge & Co. Lith. Cin.

Map No. 1.

LATITUDE OBSERVATORY—CAMP WATSON.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Jan. 9	885	N	15 32.50	----------	54	42	-------	------	52 11 17.98
	921	S	9 6.80	+ 5 6.45	58	38	+32	------	20 46 38.28
Jan. 9	1066	N	14 8.60	----------	50.5	45.5	-------	------	49 01 19.33
	1095	S	13 17	+ 1 6.90	61	35	+31	------	23 59 30.36
Jan. 9	1132	S	12 7.80	----------	34.5	62.5	-------	------	33 30 49.12
	1219	N	6 15	— 6 6.30	68.5	27.5	+13	------	39 36 11.15
Jan. 9	2616	N	20 8.25	----------	55.5	45.1	-------	------	56 52 16.00
	2639	S	20 49	+ 0 3.35	50	51	+ 9	------	16 09 54.00
Jan. 10	648	S	17 35	----------	37	59	-------	------	22 47 51.71
	673	N	2 9.50	—14 40	65	32	+11	------	50 24 51.21
Jan. 10	766	S	19 11.50	----------	52	42	-------	------	24 36 43.03
	827	N	1 8.40	—17 27.50	50	48	+15	------	48 38 07.21
Jan. 10	885	N	13 29	----------	46	52	-------	------	52 11 17.98
	921	S	7 51	+ 5 7.80	70	28	+36	------	20 46 38.28
Jan. 10	981	N	20 6.40	---- ---	51	47	-------	------	39 04 39.97
	1017	S	0 0	+20 6.40	63	35	+32	------	33 42 26.97
Jan. 10	1066	N	11 0	----------	61	37	-------	------	49 01 19.33
	1095	S	8 7.50	+ 1 8.50	45	53	+16	------	23 59 30.36
Jan. 10	1132	S	11 9.25	----------	-------	-------	-------	------	----------
	1219	N	4 8.75	— 6	-------	-------	-------	------	----------
Jan. 10	1554	N	12 6.30	----------	54	45	-------	------	51 24 37.34
	1571	S	3 7	+ 8 9.30	55	44	+20	------	21 31 05.84
Jan. 12	506	S	4 9.75	----------	35.5	54.5	-------	------	36 26 18.31
	580	N	8 8.50	+ 3 11	43.5	46.5	—12	------	36 33 47.80
Jan. 12	1914	N	2 26.50	----------	55	41	-------	------	49 54 13.42
	1938	S	13 9.25	—10 8.27	35	61	—12	------	23 16 08.27
Jan. 13	648	S	17 6.45	----------	39	56	-------	------	22 47 51.97
	673	N	3 6.15	—14 3	47	48	—18	------	50 24 51.33
Jan. 13	766	S	18 0.50	----------	42	58	-------	------	24 36 42.87
	827	N	1 30	—16 6.95	43	54	—27	------	48 38 07.45

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
72 57 56.26						Camp Watson is north
36 28 58.13	+ 2 03.62	+7.60	+0.04		36 31 9.35	of station 0+456—
73 00 49.69						7768 feet. 7768 feet
36 30 24.84	+ 0 37.00	+7.36	+0.01		9.20	=1′ 16″.76.
73 07 00.77						Zenith telescope No. 4,
36 33 30.38	— 2 25.25	+3.09	—0.04		8.28	U. S. coast survey.
73 02 10.00						
36 31 05.00	+ 0 07.33	+2.10			14.43	Sid. chronometer 1707,
73 12 42.92						(Jno. Fletcher's) U.
36 36 21.46	— 5 15.36	+2.61	—0.09		8.62	S. C. S.
73 14 50.24						Observations for time
36 37 25.12	— 6 18.32	+3.56	—0.10		10.26	with transit No. 10,
72 57 56.26						U. S. C. S.
36 28 58.13	+ 2 06.53	+8.55	—0.04		13.09	
72 47 06.94						Value of turn of mi-
36 23 33.47	+ 7 32.02	+7.60	—0.13		13.22	crometer zenith tele-
73 00 50.69						scope No. 4, 43″.8.
36 30 25.34	+ 0 48.32	+3.80	—0.03		9.69	
						Value of one division of
						level of zenith tele-
72 55 43.18						scope No. 4, 0″.95.
36 27 51.59	+ 3 15.17	+4.75	+0.06		11.57	
73 00 06.11						
36 30 03.05	+ 1 08.11	+2.85	+0.02		8.53	
73 10 21.69						
36 35 10.84	— 3 57.71	—2.85	—0.07		10.21	
73 12 43.30						
36 36 21.65	— 5 07.25	—4.27	—0.09		9.54	
73 14 30.32						
36 37 25.16	— 6 05.42	—6.41	—0.10		13.03	

LATITUDE OBSERVATORY—CAMP WATSON.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Jan. 15	888	N	13 30	----------	49	48	--------	------	52 11 18.33
	921	S	6 9.15	+ 6 38.50	38.5	58.5	—19	------	20 46 38.16
Jan. 15	981	N	20 7.35	----------	44.5	53	--------	------	39 04 40.16
	1017	S	0 47.50	+21 21	44.5	53	— 0.0	------	33 42 27.09
Jan. 15	1066	N	10 9.10	----------	54	45.5	--------	------	49 01 19.76
	1095	S	8 47.50	+ 2 43.50	33.5	64	—20	------	23 59 30.35
Jan. 15	1132	S	13 8.55	----------	41	57	--------	------	33 30 49.66
	1219	N	7 17.50	— 6 18	51	47.5	—12.5	------	39 36 11.26
Jan. 15	1313	N	9 18	----------	41.5	56.5	--------	------	60 24 02.78
	1384	S	15 7.95	— 7 6.15	44.5	54.5	—25	------	12 44 03.33
Jan. 15	1504	N	3 6.60	----------	47	52	--------	------	53 31 33.64
	1563	S	11 50.50	— 7 8.45	43	55	—17	------	29 36 38.22
Jan. 15	1642	N	5 8.35	----------	53	47	--------	------	57 24 25.00
	1701	S	15 47	— 9 6.35	39	61	—16	------	25 45 09.93
Jan. 15	1776	N	13 7.45	----------	52	48	--------	------	56 30 21.17
	1792	S	7 31.50	+ 6 43	40	60	—16	------	16 27 36.38
Jan. 15	1830	N	2 38.50	----------	67	32	--------	------	39 07 48.91
	1857	S	0 27	+ 2 6.55	30	69	— 4	------	33 52 41.81
Jan. 15	1914	N	8 7.20	----------	55	45	--------	------	49 54 13.42
	1938	S	19 23.50	— 1 51.50	37	63	—16	------	23 16 08.27
Jan. 15	2044	N	17 9.35	----------	47	53	--------	------	49 21 24.14
	2063	S	4 2.50	+13 9.10	49	50.5	— 7.5	------	23 31 05.21
Jan. 15	2170	S	11 25	----------	50	50	--------	------	28 23 06.21
	2182	N	11 22.75	— 0 22.50	43	57	—14	------	44 39 25.89

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ″	
72 57 56.49						
36 28 58.24	+ 2 19.83	—2.14	+0.04	.....	36 31 15.97	
72 47 47.25						
36 23 53.62	+ 7 41.49	—4.04	+0.13	.....	14.20	
73 00 50.11						
36 30 25.06	+ 0 53.32	—4.75	+0.02	.....	13.65	
73 07 00.92						
36 33 30.46	— 2 15.34	—2.97	—0.03	.....	12.12	
73 08 06.11						
36 34 03.05	— 2 46.76	—3 56	—0.05	.....	12.68	Micrometer IT wrong.
73 08 11.86						
36 34 05.93	— 2 51.75	—4 04	—0.06	.....	10.08	
73 09 32.93						
36 34 46.46	— 3 31.01	—3.80	—0.06	.....	11.59	
72 57 57.55						
36 28 58.77	+ 2 20.81	—4.27	—0.04	.....	15.27	
73 00 30.78						
36 30 15.39	+ 0 58.14	—0.95	+0.02	.....	12.50	
73 10 21.69						
36 35 10.84	— 3 50.28	—3.80	—0.07	.....	16.69	
72 52 29.35						
36 26 14.67	+ 5 04.63	—1.78	+0.09	.....	17.61	
73 02 32.10						
36 31 16.05	— 0 00.49	—3.32	+0.00	.....	12.24	
Mean of 26 observations					36 31 12.06	
Observatory north of station 0+456					1 16.36	
Latitude of station 0+456					36 29 55.70	

to station 66+750, a mulberry post; thence S. 83° 35′ E., to stone No. 2, at station 79+550; thence S. 88° 57′ 40″ E., to station 90+723; thence S. 88° 5′ E., to station 95+860; thence S. 88° 10′ E., to station 101+304; thence S. 87° 17′ E., to stone No. 3, station 105+600; thence as follows, same course continued, to station 106+586; thence S. 88° 25′ E., to station 111+568; thence S. 88° 5′ E., to station 117+226;

52 · 800

Cypress Slough

Eastage Arm

RATCLIFFE'S

Grain Point

REELFOOT LAKE

Willow Pt.

LONG POINT

Rittenhouse Slough

Green Timber or Grassy Arm

Deep Slough

66 · 751

36° 30' 20" (A)

Cypress Slough

OBION

FULTON

36°30'27"68 N°2 - 79 · 550

Rec. 36° 30'

Cooks Branch

HICKMAN

105 · 600

36°30'16"50 N°3 HICKMAN

Reelfoot Cr.

Obion R.

116 · 600

Map No. 2.

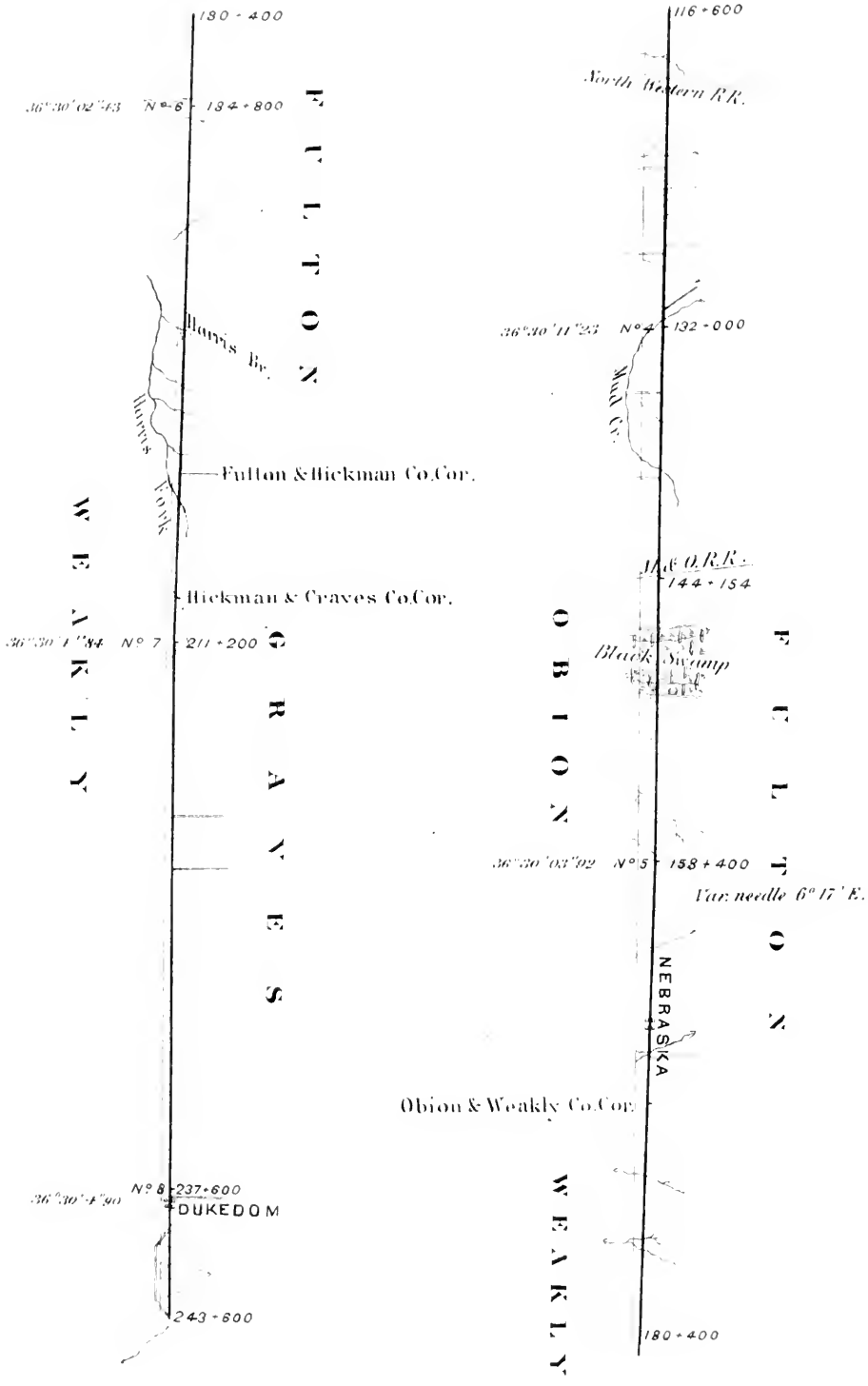
LATITUDE OBSERVATIONS AT PUCKETT'S, REELFOOT BLUFFS.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Feb. 27	3046	S	13 1.37	----------	43	51	--------	6	30 46 22.15
	3059	N	5 0.75	— 8 0.62	36	59	—0.31	7	42 20 18.00
Feb. 27	3140	N	16 8.85	----------	49	46	--------	12	54 36 03.14
	3171	S	7 51.12	+ 2 3.73	31	64	—0.30	8	18 17 58.30
Feb. 27	3261	N	14 50	----------	54	41	--------	4	37 01 16.81
	3297	S	12 3.42	+ 2 1.58	26	68	—0.29	4	35 58 9.44
Feb. 27	3346	N	17 1.86	----------	65	29	--------	12	59 41 56.97
	3406	S	6.33	+16 5.53	22	--------	—0.30	8	23 6 49.68
Feb. 28	1776	N	11 5.50	----------	43	41	--------	16	56 30 27.39
	1792	S	7 8.55	3 6.95	33	51	—0.16	22	16 27 35.43
Feb. 28	1850	N	9 4.83	----------	65	18	--------	6	39 07 54.56
	1857	S	9 4.83	----------	15	68	—0.06	20	33 52 44.15
Feb. 28	1914	N	3 9.63	----------	42	41	--------	12	49 54 18.21
	1938	S	17 2.95	—13 3.32	33	51	—0.17	13	23 16 08.74
Feb. 28	1965	N	8 0	----------	40	43	--------	9	48 44 20.11
	1981	S	22 5.43	—14 5.43	34	49	—0 18	12	24 26 56.35
Feb. 28	2044	N	21 7.70	----------	42	41	-- -----	11	49 21 39.29
	2063	S	10 6.33	+11 1.37	33	50	—0.16	11	23 31 07.04
Feb. 28	2170	S	13 7	----------	37	46	--------	5	28 23 08.71
	2182	N	10 8.92	— 2 8.07	38	47	—0.18	12	14 39 31.46
Feb. 28	2270	N	12 8.86	----------	43	41	--------	------	38 14 41.09
	2314	S	6 1.33	+ 6 7.53	33	51	—0.16	------	34 41 05.67
Feb. 28	2429	N	10 5.55	-- -------	49	34	--------	------	49 56 32.64
	2464	S	9 9.05	+ 6.50	25	58	—0.18	------	32 03 46.38
Feb. 28	2516	N	16 7.96	----------	48	36	--------	------	59 02 20.33
	2557	S	3 7.60	+13 7.29	31	53	—0.10	------	13 48 23.63
Feb. 28	2616	N	8 9.87	----------	41	43	--------	------	56 52 25.73
	2639	S	11 1.90	— 2 2.03	38	46	—0.10	------	16 09 55.50

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 06 40.15						Observatory 513 feet south of station, 80 +661. 513=5″.07.
36 33 20.07	— 2 56.50	—7.36	—0.03	—0.01	36 30 16.19	
72 54 01.44						
36 27 00.72	+ 3 25.26	—7.12	+0.07	+0.03	18.96	
72 59 26.25						
36 29 43.12	+ 0 47.25	—6.89	—0.00	0.00	23.48	
72 48 46.65						
36 24 23.32	+ 6 02.52	—7.12	+0.03	+0.02	18.77	
72 58 02.82						
36 29 01.41	+ 1 20.92	—3.80	+0.03	—0.20	18.36	
73 00 38.71						
36 30 19.35	0 00.00	—1.42	—0.00	—1.46	16.47	
73 10 26.95						
36 35 13.47	— 4 51.96	—4.04	—0.06	—0.05	17.36	
73 11 16.46						
36 35 38.23	— 5 18.50	—4.27	—0.06	—0.09	15.31	
72 52 37.33						
36 26 18.66	+ 4 03.89	—3.80	+0.08	+0.05	18.86	
73 02 40.17						
36 31 20.08	— 1 01.48	—4.27	—0.01	+0.15	14.47	
72 55 49.76						
36 27 54.88	+ 2 27.90	—3.80	+0.05	—0.00	19.03	
73 00 19.02						
36 30 09.51	+ 0 14.23	—4.28	+0.05	-------	19.51	
72 50 43.96						
36 25 21.98	+ 5 00 67	—2.38	+0.12	-------	20.39	
73 02 19.23						
36 31 09.61	— 0 48 23	—2.38	-------	-------	19.00	
					36 30 18.30	
Observatory south of the line					5.07	
Latitude of station 80+661					36 30 23.27	

thence S. 89° 16′ E., to station 125+059; thence S. 89° 46′ E., to station 125+667; thence S. 87° 57′ E., to station 128+307; thence S. 88° 33′ E., to station 131+035; thence S. 88° 33′, passing stone No. 4, at 132,000 feet, to station 133+720; thence S. 88° 07′ E., to station 136+360; thence S. 89° 42′ E., to station 139+007; thence S. 89° 28′ E., to station 141+770; thence S. 88° 15′ E., to station 144+575; thence S. 88° 16′ E., to station 147+230; thence S. 88° 32′ E., to station 149+855; thence S. 89° 02′ E., to station 152+586; thence S. 89° 21′ E., to station 154+864; thence S. 87° 30′ E., to station 157+439; thence S. 87° 43′, passing stone No. 5, to station 160+657; thence S. 89° 12′ E., to station 163+384; thence S. 89° 15′ E., to station 168+770; thence S. 89° 31′ E., to station 171+356; thence S. 89° 51′ E., to station 174+225; thence N. 89° 18′ E., to station 176+637; thence N. 89° 28′ E., to station 179+543; thence N. 89° 57′ E., to station 182+187; thence N. 89° 59′ E., to station 184+8.0, at stone No. 6; thence N. 89° 25′ E., to station 187+531; thence N. 89° 10′ E., to station 190+226; thence N. 89° 41′ E., to station 192+830; thence N. 89° 57′ E., to station 195+490; thence N. 89° 04′ E., to station 198+358; thence N. 89° 19′ E., to station 200+833; thence S. 89° 51′ E., to station 203+504; thence N. 89° 37′ E., to station 206+169; thence N. 89° 22′ E., to station 208+784; thence N. 89° 52′ E., passing stone No. 7, to station 211+619; thence S. 89° 49′ E., to station 214+210; thence N. 89° 34′ E., to station 216+908; thence N. 89° 17′ E., to station 219+611; thence N. 89° 20′ E., to station 222+296; thence S. 89° 35′ E., to station 224+970; thence N. 89° 53′ E., to station 227+620; thence S. 89° 52′ E., to station 230+286; thence S. 89° 52′ E., to station 232+921; thence S. 89° 40′ E., to station 235+628; thence S. 89° 00′ E., passing stone No. 8, to station 238+337; thence S. 89° 35′ E., to station 241+116; thence S. 88° 37′ E., to station 243+774;


180 + 400
36°30'02"43 N° 6 184 + 800
FULTON
Harris Br.
Harris Fork
Fulton & Hickman Co. Cor.
WEAKLY
Hickman & Graves Co. Cor.
36°30'1"84 N° 7 211 + 200
GRAVES
36°30'4"90 N° 8 237 + 600
DUKEDOM
243 + 600
116 + 600
North Western R.R.
36°30'11"23 N° 4 132 + 000
Mud Cr.
M. & O. R.R.
144 + 154
OBION
Black Swamp
FULTON
36°30'03"92 N° 5 158 + 400
Var: needle 6° 17' E.
NEBRASKA
Obion & Weakly Co. Cor.
WEAKLY
180 + 400

Map No. 3.

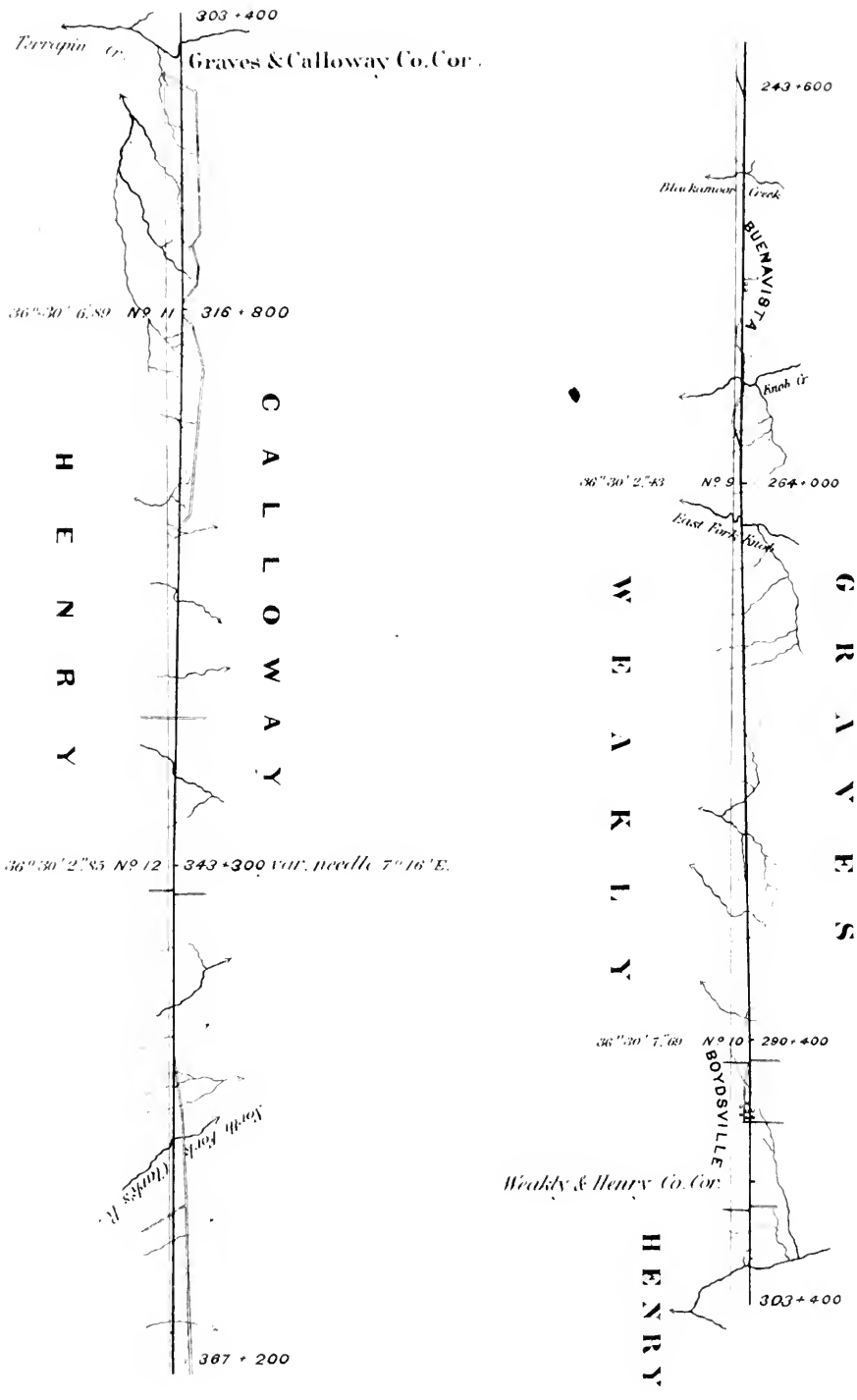
LATITUDE OBSERVATORY—MUD CREEK.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
March 5	2270	N	12 28.50	----------	40	46	--------	------	38 14 44.09
	2314	S	5 7.77	+ 6 50.80	27	58	—0.37	------	34 41 05.67
March 5	2429	N	9 37.70	----------	35	51	--------	------	40 56 32.64
	2464	S	9 09.20	+ 0 28.50	33	53	—0.36	------	32 03 46.38
March 5	2516	N	17 55.50	----------	42	45	--------	------	59 02 20.33
	2537	S	4 00.20	+13 55.30	30	56	—0.29	------	13 48 23.63
March 5	2616	N	9 55.90	----------	34	53	--------	------	56 52 25.73
	2639	S	11 8.29	— 2 27.00	36	51	—0.34	------	16 09 53.50
March 5	3216	N	9 20.20	----------	45	43	--------	------	37 01 16.81
	3297	S	8 02.20	+ 1 18.00	50	38	+0.14	------	35 58 09.44
March 5	3346	N	17 47.10	----------	52	36	--------	------	59 41 56.97
	3406	S	1 46.30	+15 7.08	47	42	+0.21	------	13 06 49.68
March 5	2170	S	13 7.05	----------	39	46	--------	------	28 33 08.71
	2182	N	10 51.00	— 3 19.50	33	52	—0.26	------	44 39 31.46
March 5	3046	S	14 04.20	----------	43	44	--------	------	30 46 22.15
	3059	N	4 59.20	— 9 45.00	68	19	+0.48	------	42 20 18.00

OBSERVATIONS WITH ZENITH TELESCOPE.

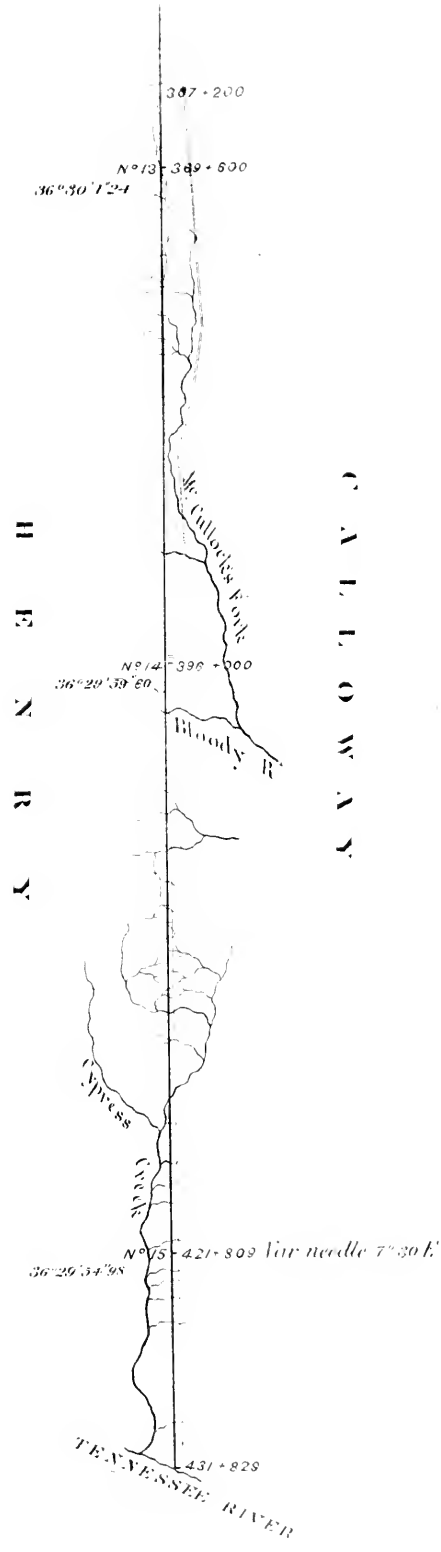
Sum and half sum.	Corrections.				Reductions.	Remarks
	Micrometer	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
72 55 49 76						Mud Creek observatory, 244 feet south of station 131+635. 244 feet=2″.41.
36 27 54.88	+ 2 22.51	−8.79	+0.05		36 30 8.65	
73 00 19.02						
36 30 09.51	+ 0 6.24	−8.55	+0.01	+0.27	7.48	
72 50 43.96						
36 25 21.98	+ 4 56.80	−6.89	+0.11	−0.38	11.62	
73 02 19.33						
36 31 09.66	− 0 49.71	−8.08	0.00	−0.49	11.33	
72 59 26.25						
36 29 43.12	+ 0 25.84	+3.33	+0.03	−0.67	11.65	
72 48 46.65						
36 24 23.32	+ 5 44.00	+4.99	+0.13	−0.35	12.09	
73 02 40.17						
36 31 20.08	− 1 09.97	−6.18	+0.01	+0.29	4.21	
73 06 40.15						
36 33 20.07	− 3 26.95	+11.40	+0.02	−0.24	4.36	
Mean of 8 observations					36 30 8.92	
Observatory south of the line					2.41	
Latitude of station 131+635					6 30 11.33	

thence N. 89° 38′ E., to station 246+299; thence N. 89° 23′ E., to station 248+956; thence S. 89° 39′ E., to station 251+591; thence S. 88° 22′ E., to station 254+268; thence N. 89° 54′ E., to station 256+950; thence S. 87° 58′ E., to station 259+320; thence N. 80° 30′ E., to station 261+960; thence N. 89° 33′ E., passing stone No. 9, which is 17 feet north of the line, to station 264+900; thence S. 89° 22′ E., to station 267+551; thence N. 89° 11′ E , to station 270+106; thence N. 89° 48′ E., to station 272+872; thence N. 89° 27′ E., to station 274+980; thence N. 89° 02′ E., to station 277+917; thence N. 86° 56′ E., to station 280+883; thence N. 87° 40′ E., to station 283+578; thence N. 88° 32′ E., to station 285+969; thence N. 87° 50′ E., to station 288+669; thence N. 88° 37′ E., passing stone No. 10, to station 291+376; thence N. 89° 35′ E., to station 293+993; thence N. 88° 59′ E., to station 296+679; thence N. 88° 54′ E., to station 299+333; thence S. 88° 36′ E., to station 301+989; thence S. 88° 32′ E., to station 304+650; thence S. 89° 34′ E., to station 307+523; thence N. 89° 45′ E., to station 309+998; thence S. 88° 28′ E., to station 312+975; thence S. 89° 54′ E., to station 315+642; thence S. 89° 34′ E., passing stone No. 11, to station 317+908; thence S. 89° 53′ E., to station 320+560; thence S. 86° 37′ E., to station 323+200; thence S. 89° 13′ E., to station 325+682; thence S. 89° 19′ E., to station 328+412; thence S. 89° 13′ E., to station 331+075; thence S. 89° 09′ E., to station 334+188; thence S. 88° 51′ E., to station 336+386; thence S. 89° 42′ E., to station 339+458; thence S. 89° 34′ E., to station 342+446; thence N. 89° 33′ E., passing stone No. 12, to station 344+756; thence S. 89° 58′ E., to station 347+391; thence S. 89° 50′ E., to station 350+022; thence S. 89° 32′ E., to station 352+674; thence S. 89° 47′ E., to station 355+378; thence east, to station 357+910; thence S. 89° 33′ E., to station 360+636; thence S. 89° 45′ E., to station 363+332; thence S. 89° 16′ E., to station 365+627; thence S. 89° 29′ E. to station 368+161; thence S. 89° 25′ E., passing stone No. 13, to station 371+107; thence S. 89° 18′ E., to station 373+770;


303 + 400
Terrapin Cr.
Graves & Calloway Co. Cor.
36°30' 6.89 N° 11 316 + 800
HENRY
CALLOWAY
36°30' 2.85 N° 12 343 + 300 var. needle 7° 16' E.
North Fork Clarks R.
367 + 200
243 + 600
Blackwood Creek
BUENAVISTA
Knob Cr
36°30' 2.83 N° 9 264 + 000
East Fork Knob
WEAKLY
GRAVES
36°30' 7.69 N° 10 290 + 400
BOYDSVILLE
Weakly & Henry Co. Cor.
303 + 400
HENRY

Map No. 4.

thence S. 88° 40′ E., to station 376+410; thence N. 88° 58′ E., to station 378+602; thence N. 89° 53′ E., to station 381+722; thence S. 89° 51′ E., to station 384+050; thence S. 89° 28′ E., to station 386+683; thence S. 89° 21′ E., to station 388+861; thence N. 89° 07′ E., to station 391+577; thence S. 89° 36′ E., to station 394+175; thence N. 89° 23′ E., passing stone No. 14, to station 396+994; thence N. 88° 56′ E., to station 399+578; thence S. 88° 42′ E., to station 402+690; thence S. 85° 45′ E., to station 405+210; thence east to station 407+833; thence S. 89° 39′ E., to station 409+587; thence S. 89° 01′ E., to station 413+050; thence S. 88° 10′ E., to station 415+686; thence S. 88° 23′ E., to station 418+469; thence S. 89° 18′ E., passing stone No. 15, to station 423+918; thence S. 88° 16′ E., to station 425+975; thence S. 87° 45′ E., to station 428+195; thence S. 88° 41′ E., to station 431+829, a small stone on the west bank of the Tennessee river.


387 + 200
N°13 389 + 600
36°30'1"24
Mc Cullochs Fork
N°14 396 + 000
36°29'39"60
Bloody R
Cypress
Creek
N°15 421 + 809 Var needle 7°30 E
36°29'54"98
431 + 829
TENNESSEE RIVER

Map No. 5.

LATITUDE OBSERVATORY—CAMP ON CYPRESS CREEK.

Date.	Star. No. B.A C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Diff. N.—S.	Meridian distance.	Declination.
1859.			″	″	″	″	″		° ′ ″
April 11	3046	S	12 37.20	----------	32	32	----------	----------	30 46 24.80
and 12	3059	N	2 6.13	— 9 7.59	39	26	+0.13	----------	42 20 2.53
April 11	3140	N	14 54.49	----------	39	26	----------	----------	54 36 11.18
and 12	3171	S	6 8.59	+ 7 6.85	28	37	+0.01	----------	18 17 59.57
April 11	3262	N	8 6.50	----------	39	28	----------	----------	37 01 20.65
and 12	3297	S	7 8.31	+ 0 13.40	35	32	+0.14	----------	35 58 13.83
April 11	3584	N	18 7.73	----------	38	33	----------	----------	39 38 39.70
and 12	3692	S	1 8.71	+20 6.44	38	33	+0.10	----------	33 06 03.45
April 11	3664	N	15 31	----------	34	28	----------	----------	57 56 19.88
and 12	3693	S	5 31.20	+ 9 9.98	45	27	+0.14	----------	24 56 05.18
April 11	3784	N	16 2.90	----------	31	39	----------	----------	38 59 57.42
and 12	3852	S	4 8.11	+11 21.80	49	24	+0.20	----------	33 51 40.36
April 11	4348	N	21 13.60	----------	42	30	----------	----------	54 51 35.51
and 12	4362	S	0 6.70	+21 20.30	38	34	+0.16	----------	17 52 39.08
April 11	4538	N	11 34.10	----------	38	35	----------	----------	49 43 58.78
and 12	4566	S	6 7.81	+ 4 56	40	33	+0.10	----------	23 12 28.96
April 11	4747	S	8 52.50	----------	41	34	----------	----------	36 09 22.13
and 12	4797	N	10 2.30	+ 1 49.89	35	39	+0.05	----------	26 49 29.03
April 11	4843	N	23 42.90	----------	37	36	----------	----------	45 00 28.12
and 12	4876	S	3 29.10	+26 7.20	38	36	+0.04	----------	27 39 53.02
April 11	4918	N	14 46.50	----------	38	37	----------	----------	59 51 38.95
and 12	5067	S	9 24.50	+ 5 22.20	16	30	+0.17	----------	13 04 09.12
April 11	5178	N	2 7.90	----------	41	35	----------	----------	37 05 19.61
and 12	5259	S	17 9.39	—15 14.90	43	34	+0.16	----------	36 05 27.55
April 11	5298	N	1 19.80	----------	39	28	----------	----------	42 58 17.86
and 12	5521	S	19 5.60	—17 8.58	43	34	+0.10	----------	30 14 41.14
April 11	5418	S	3 9.50	----------	41	35	----------	----------	26 14 14.80
and 12	5463	N	13 35.40	+ 9 40.40	45	32	+0.19	----------	46 38 38.10

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections. Micrometer.	Level.	Refr.	Meridian	Reductions. Latitude.	Remarks.
° ′ ″	″	″	″		° ′ ″	
73 06 48.33						Observatory 101 ft. N. of station 418+116. 101 feet=0″.99.
36 33 24.16	−3 33.72	+3.09	+0.06		36 29 53.53	
72 54 10.05						
36 27 05.02	+2 48.30	+0.95	+0.05		54.32	
72 59 34.48						
36 29 47.24	+0 02.93	+3.33	+0.01		53.81	
72 44 42.15						
36 22 21.07	+7 32.10	+2.38	+0.13		55.68	
72 52 25.06						
36 26 12.53	+3 38.90	+3.33	+0.06		54.88	
72 51 33.78						
36 25 46.89	+4 05.67	+4.75	+0.07		57.38	
72 44 14.59						
36 22 07.29	+7 44.34	+3.80	+0.14		55.57	
72 56 26.44						
36 28 13.22	+1 59.86	+2.38	+0.03		55.49	
72 58 52.16						
36 29 26.08	+0 32.80	+0.71	+0.02		59.61	
72 49 21.14						
36 20 10.57	+9 45.17	+0.95	+0.18		56.87	
72 55 48.08						
36 27 54.04	+1 54.36	+4.04	+0.03		62.47	
73 10 47.15						
36 35 23.37	−5 31.76	+3.80	−0.08		55.53	
73 12 59.30						
36 36 29.65	−6 31.09	+2.38	−0.11		60.83	
72 52 52.90						
36 26 26.45	+3 25.95	+4.51	+0.06		56.97	

LATITUDE OBSERVATORY—CAMP ON CYPRESS CREEK.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
April 11	5911	N	21 23.05	----------	43	35	----------	------	48 22 20.69
and 12	5937	S	2 5.04	+19 18.10	40	38	+0.10	------	24 23 24.50
April 11	60 5	S	5 19	----------	39	40	----------	------	24 23 10.20
and 12	6056	N	20 38.08	+15 11.80	48	30	+0.17	------	48 25 35.09
April 11	6091	N	6 9.80	----------	45	33	----------	------	51 29 59.02
and 12	6106	S	14 8.80	— 7 9.07	36	43	+0.05	------	21 35 38.20

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half cum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Mean.	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
72 45 45.19						
36 22 52.59	+7 00.06	+2.38	+0.13	.....	36 29 55.16	
72 48 45.29						
36 24 22.64	+5 31.08	+1.04	+0.10	.....	57.87	
73 05 37.22						
36 32 48.61	−2 53.16	+1.19	−0.05	.....	56.59	
Mean of 17 observations.....					36 29 56.04	
Observatory north of line..					.72	
					9 55.32	

Beginning at small stone on the east bank of the Tennessee river, at station 427+721; thence N. 86° 41′ E., to station 440+167; thence S. 83° 28′ E., to station 446+563; thence S. 83° 8 E., passing stone No. 16, to station 449+541; thence S. 82° 45′ E., to station 451+754; thence S. 82° 8′ E., to station 455+898; thence S. 83° 11′ E., to station 459+780; thence S. 83° 33′ E., to station 462+499; thence S. 82° 57′ E. to station 466+944; thence S. 85° 37′ E., to station 470+719; thence S. 84° 44′ E., to station 475+666, at stone No. 17, on the west bank of the Cumberland river; thence S. 85° 29 E., passing a small stone on the east bank of Cumberland river, to station 491+313, small rock at hickory and gum; thence S. 5° 12′, W. 11,149 feet, to small stone at three black-oaks, station 490+302;

Bloody R.
Bar-needle 7°30E.
PINE BLUFF
R I V E R
T E N N E S S E E
427+721
Swamp
Jones Creek
Assumed parallel
Pine Bluff & Canton
No 16 448-070
36°-40'-32"30
S T E W A R T
T R I G G
Byrons Cr.
Tindall's Cr.
CUMBERLAND
No 17
475-676
476-263
36°-40'-00"78
RIVER
Bar needle 6°48 E
TOBACCO PORT
Sullins Cr.
36°-37'-58"74
490-302
491+312

Map No. 6.

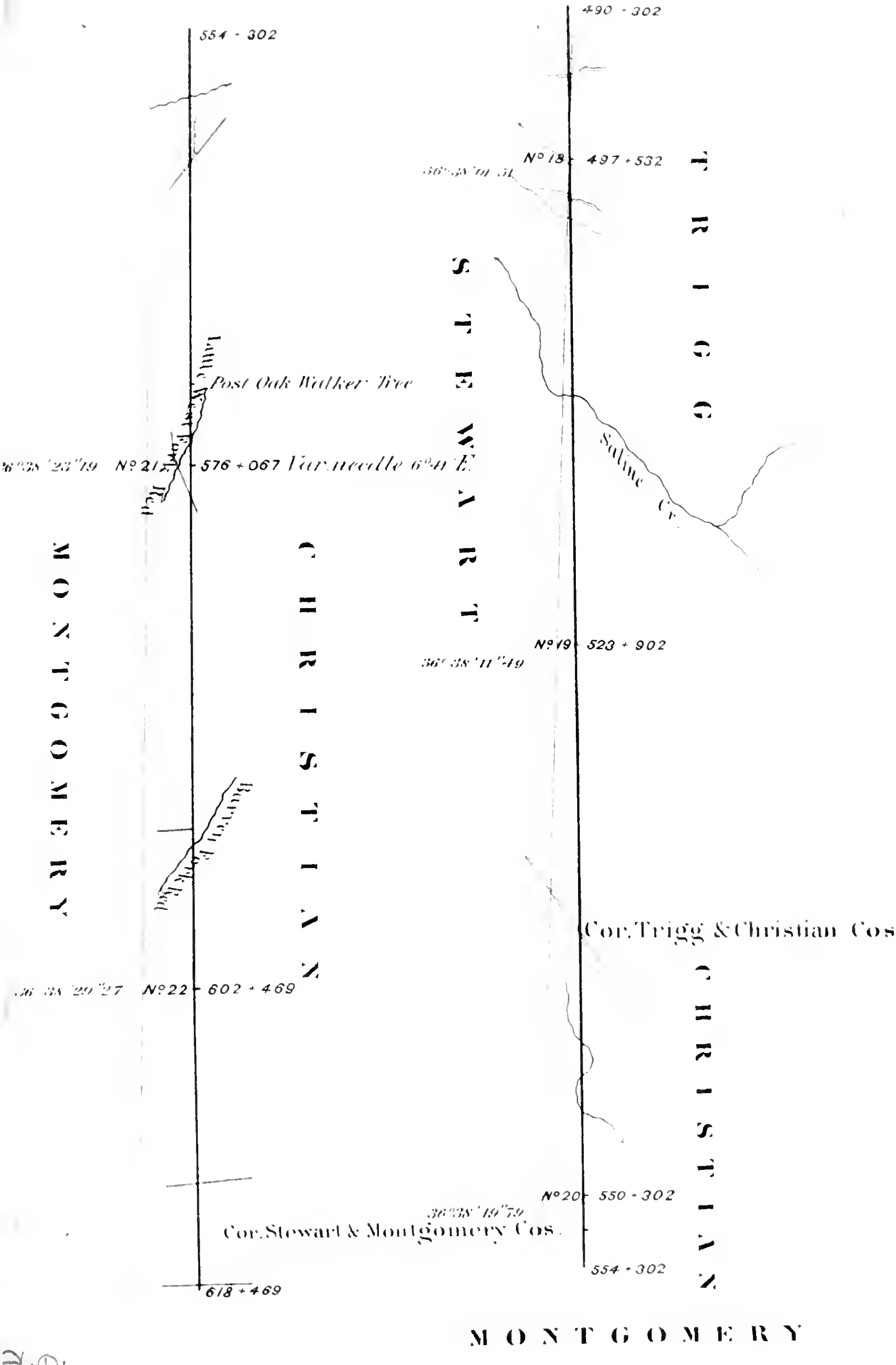
LATITUDE OBSERVATORY—CAMP NEAR LINE PORT.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
May 3	4566	S	3 6.01	----------	36	42	-------	------	23 12 32.01
	4607	N	12 9.44	+ 9 34.30	24	54	—0.36	------	50 00 55.12
May 4	4566	S	4 38.70	----------	42	34			
	4607	N	13 6.38	+ 9 25.10	33	44	—0.03	------	----- ------
May 5	4566	S	4 11.50	----------	35	42			
	4607	N	13 6.50	+ 8 9.50	51	28	+0.16	------	----------
May 3	4747	S	12 8.84	----------	40	38	--------	-----	36 09 28.63
	4825	N	7 6.18	— 5 26.60	24	54	—0.28	------	37 14 36.69
May 4	4747	S	11 51.30	----------	44	34			
	4825	N	6 12.50	— 5 38.80	29	49	—0.10	------	----------
May 5	4747	S	11 8.55	----------	39	39			
	4825	N	6 22.90	— 5 6.26	45	33	+0.12	------	------- ----
May 4	3767	N	10 32.80	----------	25	44	--------	------	57 08 08.03
	3838	S	10 29	+ 0 3.80	39	30	—0.10	------	16 11 54.39
May 5	3767	N	7 8.10	----------	39	31			
	3838	S	8 13.80	— 0 52.80	40	30	+0.18	------	----------
May 4	4108	N	1 41.90	----------	40	33	--------	------	57 50 18.68
	1125	S	16 8.22	—15 40.30	35	38	+0.04	------	15 40 54.05
May 5	4108	N	1 33.60	----------	38	34			
	1125	S	16 7.38	—15 40.20	35	38	+0.01	------	----------
May 4	4148	N	15 7.58	----------	40	33	--------	------	49 45 44.00
	1240	S	1 9.29	+13 8.29	31	45	—0.07	------	23 24 12.18
May 4	4258	N	15 12.20	----------	41	34	--------	------	41 38 57.03
	4360	S	3 8.16	+11 20.60	51	25	+0.33	------	31 32 40.17
May 5	4258	S	13 6.05	----------	28	46			
	4360	N	1 8.41	+11 7.64	43	32	—0.07	------	----------
May 5	3877	S	5 9.67	----------	38	32	--------	------	11 18 11.89
	3918	N	19 7.99	+13 8.32	32	39	—0.01	------	61 51 52.02
May 5	4103	S	6 36.20	----------	40	35	--------	------	17 35 53.70
	4181	N	12 31.80	+ 5 9.50	59	25	+0.30	------	55 39 37.96

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reduction.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 13 27.13						Observatory 336 ft. N. of station 417+000. 336 feet=3″ 32
36 36 43.56	+ 3 24.61	−8.55	+0.06		36 39 59.68	
	+ 3 22.60	−0.71	+0.06		65.46	
	+ 3 16.00	+3.80	+0.06		63.37	
73 24 05.32						
36 42 02.66	− 1 55.33	−6.65	−0.02		60.66	
	− 1 58.00	−2.38	−0.02		62.26	
	− 2 03.21	+2.85	−0.02		62.28	
73 20 02.42						
36 40 01.21	+ 0 00.83	−2.38	0		59.66	
	− 0 07.18	+4.28	0		58.31	
73 31 12.73						
36 45 36.36	− 5 37.32	+0.95	−0.10		59.89	
	− 5 37.31	+0.24	−0.10		59.19	
73 09 56.18						
36 34 58.09	+ 5 02.85	−1.66	+0.09		59.37	
73 11 37.20						
36 35 48.60	+ 4 05.41	+7.84	+0.06		61.91	
	+ 4 17.63	−1.66	+0.06		64.63	
73 10 03.91						
36 35 01.95	+ 5 02.92	−0.24	+0.10		64.73	
73 15 31.66						
36 37 45.83	+ 2 09.44	+7.13	+0.04		62.44	
Mean of 15 observations					36 40 01.63	
Observations north of line					03.32	
Latitude of station 447+000					36 39 58.31	

thence N. 87° 44′ E., passing stones Nos. 18 and 19, to station 536+512; thence N. 88° 20′ E., to stone No. 20, at station 550+302; thence N. 88° 30′ E., to station 552+882; thence N. 89° 21′ E., to station 567+247; thence N. 89° 16′ E., to station 577+472, passing stone No. 21; thence N. 88° 44′ E., to station 585+897; thence N. 89° 31′ E., to station 591+713; thence N. 87° 15′ E., to station 598+581; thence N. 89° 41′ E., to station 600+818; thence N. 89° 28′ E., to station 602+469, stone No. 22; thence N. 89° 31′ E., to station 606+144; thence N. 89° 29′ E., to station 617+818;


554 + 302
490 + 302
TRIGG
N° 18 497 + 532
STEWART
Post Oak Walker Tree
N° 21 576 + 067
Saline Cr.
MONTGOMERY
CHRISTIAN
N° 19 523 + 902
36°38'11"49
Cor. Trigg & Christian Cos
N° 22 602 + 469
36°38'29"27
CHRISTIAN
N° 20 550 + 302
36°38'19"79
Cor. Stewart & Montgomery Cos.
554 + 302
618 + 469
MONTGOMERY

Map No. 7.

LATITUDE OBSERVATORY—CAMP NEAR TRIGG COUNTY CORNER.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
May 27	4747	S	13 20.80	----------	50	33	----------	------	36 09 33.82
	4825	N	4 55.60	— 8 9.52	41	46.5	+16.5	------	37 14 42.17
May 27	4952	N	10 16.50	----------	44	41	----------	------	47 49 59.49
	4981	S	6 16.10	+ 4 0.40	37	42	— 2	------	25 25 01.58
May 28	4952	N	10 8.48	----------	38	40			
	4981	S	6 9.96	+ 3 8.52	45	34	+ 9	------	----------
May 31	4952	N	10 6.31	----------	29	41			
	4981	S	7 5.90	+ 3 59.20	52	19	+21	------	----------
May 27	5098	S	6 57.40	----------	42	43	----------	------	29 35 25.59
	5157	N	12 8.49	+ 6 27.50	40	45	— 6	------	43 37 56.74
May 28	5098	S	6 54.10	----------	41	38			
	5197	N	12 48.70	+ 6 14.80	42	38	+ 7	------	----------
May 31	5098	S	6 38.40	----------	34	37			
	5157	N	12 6.83	+ 6 29.90	29	42	—16	------	----------
May 28	4148	N	14 15	----------	35	39	----------	------	49 45 57.97
	4240	S	3 8.78	+10 30.20	48	26	+18	------	23 24 17.01
May 28	4258	N	12 11.30	----------	51	24	----------	------	41 39 01.15
	4360	S	3 7.76	+ 8 33.70	37	59	+25	------	31 32 44.15
May 28	4403	S	5 7.01	----------	31	44	----------	------	17 35 52.64
	4484	N	8 9.64	+ 3 26.30	38	37	—12	------	55 39 42.47
May 27	4493	N	3 8.71	— 1 8.30	37	39	—12	------	55 43 23.65
	5259	S	37.40	----------	36	48	----------	------	36 05 39.33
	5310	N	13 8.60	+13 45.60	45	40	— 7	------	37 02 34.59
May 28	5310	N	14 15.90	----------	38	42			
	5259	S	6.96	+13 45.30	42	38	— 0	------	----------
	5178	N	9 9.71	+ 9.29.50	37	43	— 2	------	37 05 34.20

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 24 15.99						Observatory 4631 ft. N. of station 523+902 4631 feet=45″.80.
36 42 07.99	−3 16.05	+5.62	+0.05		36 38 55.51	
73 15 01.07						
36 37 30.53	+1 27.69	+0.47	+0.03		57.78	
	+1 24.36	+2.14	+0.03		57.06	
	+1 18.66	+4.99	+0.02		54.20	
73 13 22.33						
36 36 41.16	+2 17.42	+1.42	+0.04		57.20	
	+2 14.51	+1.66	+0.04		57.37	
	+2 17.95	−3.80	+0.04		55.35	
73 10 14.98						
36 35 07.49	+3 45.61	+4.27	+0.06		57.43	
73 11 45.30						
36 35 52.65	+3 02.58	+5.94	+0.05		61.22	
73 15 35.11						
36 37 47.55	+1 11.46	−2.85	+0.02		56.18	
73 19 16.29						
36 39 38.14	−0 40.08	−2.85	+0.01		55.20	
73 08 13.92						
36 34 06.96	+4 55.34	−1.66	+0.08		60.72	
	+4 14.62	0	+0.08		61.66	
73 11 36.76						
36 35 48.38	+3 33.12	−4.47	+0.06		59.47	

LATITUDE OBSERVATORY—CAMP NEAR TRIGG COUNTY CORNER.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
May 21	5178	N	12 6.65	----------	28	43	--------	------	37 05 34.20
	5259	S	3 21.60	+ 9 44.90	32	39	—0.22	------	36 05 39.33
May 28	4538	N	18 8.29	----------	39	37	--------	------	49 44 12.40
	4575	S	6 30.70	+12 52.20	33	43	—0.08	------	23 24 38.60
May 28	4804	N	5 8.59	----------	36	43	--------	------	50 28 32.20
	4810	S	10 54.80	— 4 6.89	42	36	—0.01	------	22 52 49.60
May 28	4823	S	7 9.44	----------	40	39	--------	------	30 21 24.90
	4885	N	5 38.60	— 2 55.80	37	42	—0.04	------	42 58 23.30
May 31	5298	N	11 8.13	----------	20	51	--------	------	42 58 33.20
	5321	S	5 13.50	+ 6 6.78	39	32	+0.24	------	30 14 37.50

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 11 13.53						
36 35 36.76	+ 3 26.92	—5.23	+0.06	.....	36 38 58.51	
73 08 51.00						
36 34 25.50	+ 4 34.23	—1.90	+0.07	.....	57.90	
73 21 21.80						
36 40 40.90	— 1 42.69	—0.24	—0.03	.....	57.94	
73 19 47.20						
36 39 53.60	— 0 56.12	—0.95	—0.00	.....	57.63	
73 13 10.70						
36 36 35.35	+ 2 26.25	—5.70	+0.04	.....	55.97	
Mean of 19 observations					38 57.29	
Observatory north of the line					45.80	
Latitude of station 523+702					36 38 11.49	

thence N. 89° 06′ E., to station 623+595; thence N. 88° 33′ E., to station 626+027; thence N 89° 05′ E., to stone No. 23, at station 628+867; thence N. 89° 08′ E., to station 634+910; thence N. 88° 47′ E., to station 637+370; thence N. 89° 54′ E., to station 645+031; thence N. 89° 24′ E., to station 650+332; thence N. 89° 58′ E., passing stone No. 24, to station 655+925; thence N. 89° 25′ E., to station 661+974; thence N. 89° 43′ E., to station 668+012; thence S. 89° 46′ E., to station 676+269; thence N. 88° 33′ E., to station 678+759; thence N. 88° 50′ E., passing stone No. 25, to station 685+682; thence N. 89° 27′ E., to station 690+207; thence N. 89° 31′ E., to station 698+455; thence N. 89° E., to station 703+451; thence N. 89° 27′ E., to station 704+913; thence N. 89° 26′ E., passing stone No. 26, to station 707+827; thence N. 89° 28′ E., to station 709+759; thence N. 88° 46′ E., to station 720+694; thence N. 89° 03′ E., to station 723+591; thence N. 88° 42′ E., to station 727+474; thence N. 89° 13′ E., to station 729+870; thence N. 87° 52′ E., passing stone No. 27, to station 735+796; thence N. 89° E., to station 739+227; thence N. 88° 34′ E., to station 744+109; thence N. 88° 39′ E., to station 746+259;

MONTGOMERY

ROBERTSON

TODD

LOGAN

CHRISTIAN

MEMPHIS BRANCH

682 · 200

E. K. R. R.

36° 38' 39" 38 — N° 26 · 707 · 207

Cor. Montgomery & Robertson Cos.

Elm Tree

Cor. Todd & Logan

36° 38' 44" 87 — N° 27 · 733 · 607 — Var: needle 6° 20' E.

KEYSBURGH

Red River

745 · 607

Beech Walker Tree

618 · 469

36° 38' 32" 42 — N° 23 · 628 · 867

Cor. Christian & Todd Cos.

36° 38' 34" 54 — N° 24 · 655 · 267

Gum Pond

Dover R.R.

Spring Cr.

36° 38' 35" 77 — N° 25 · 678 · 200

GRAYSVILLE

682 · 200

Map No. 8.

thence N. 88° 26′ E., to station 749+202; thence N. 88° 44′ E., to station 753+994; thence N. 88° 32′ E., to station 757+601; thence N. 87° 28′ E., to station 761+760, at stone No. 28; thence N. 88° 44′ E., to station 766+453; thence S. 89° 11′ E., to station 769+468; thence N. 87° 59′ E., to station 773+549; thence N. 89° 18′ E., to station 779+196; thence N. 88° 53′ E., passing stone No. 29, to station 791+286; thence N. 88° 33′ E., to station 798+393; thence N. 88° 24′ E., to station 805+863; thence S. 89° 58′ E., passing stone No. 30, to station 813+522; thence N. 86° 37′ E., to station 827+196; thence N. 87° 59′ E., to station 831+967; thence N. 88° 12′ E., passing stone No. 31, to station 846+533; thence N. 88° 53′ E., to stone No. 32, at station 856+572; thence S. 47° 53′ E., to station 866+860, large stone at black-jack; thence N. 68° 1′ E., to station 870+893, the first corner of the Middleton offset; thence N. 7° 30′ E., 2484 feet, to second corner; thence S. 82° 30′ E., 1927 feet, to third corner; thence S. 7° 30′ W., 1256 feet, to fourth corner, and station 873+125; thence N. 68° 01′ E., to stone No. 33, at station 884+596, (beech);

745 · 607
36°38'51"42
N° 28 · 761 · 760
Springfield & Russellville
ROBERTSON
LOGAN
Middle Fork Red
36°38'55"41
N° 29 · 786 · 407
SIMPSON
Bee Tree Road
809 · 407

36°39'00"08
N° 30
812 · 807
Cor. Logan & Simpson
Hall's Br.
North Fork Red
36°39'10"19
N° 31
834 · 186
ROBERTSON
SIMPSON
36°39'14"51
N° 32
856 · 572
Cor. Robertson & Summer Cos.
36°38'42"23
MITCHELLVILLE
Lou. & Nash. pike
870 · 893
873 · 125
L & N R R

Map No. 9.

LATITUDE OBSERVATORY—CAMP NEAR BLACK JACK, ON L. & N. TURNPIKE.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
July 0	5098	S	10 8.45	.....	35	35	.....	.....	29 35 33.59
	5157	N	14 26.50	+ 3 42	38	32	+0.06	.....	43 38 06.70
July 8	5098	S	4 32.90	.....	26	31			
	5157	N	7 7.95	+ 3 46.60	32	34	+0.03	.....	.....
July 9	5098	S	9 8.29	.....	32	35			
	5057	N	13 14.80	+ 3 31.90	42	24	+0.15	.....	.....
July 8	5178	N	14 13.50	.....	32	38	.....	.....	37 05 42.95
	5259	S	7 55.20	+ 6 58.30	42	27	+0.10	.....	36 05 49.83
July 9	5178	N	13 9.57	.....	34	32			
	5259	S	7 33.80	+ 6 6.10	33	33	+0.02	.....	.....
July 6	5298	N	13 11.10	.....	33	37	.....	.....	42 58 42.34
	5321	S	9 13.10	+ 3 9.80	34	36	—0.06	.....	30 14 45.63
July 8	5298	N	14 37	.....	40	30			
	5321	S	10 53.10	+ 3 8.30	34	37	+0.07	.....	.....
July 6	5399	S	8 15.90	.....	37	33	.....	.....	23 51 41.37
	5461	N	11 2.80	+ 2 8.69	31	40	—0.05	.....	49 22 36.63
July 8	5299	S	9 50.20	.....	34	26	.....	.....	.....
	5461	N	12 13	+ 2 6.28	42	29	+0.11	.....	.....
July 8	5541	S	10 12.40	.....	36	36	.....	.....	30 47 48.56
	5644	N	8 7.35	— 1 38.99	38	34	+0.04	.....	42 29 32.26
July 6	6052	N	21 16.70	.....	25	37	.....	.....	50 48 57.62
	6134	S	7.99	+20 36.80	42	30	+0.10	.....	22 12 35.81
July 6	6162	N	13 45	.....	29	44	.....	.....	43 26 46.68
	6237	S	10 8.83	+ 2 56.70	47	27	+0.05	.....	29 47 39.11
July 8	6162	N	12 8.48	.....	45	30			
	6237	S	10 39	+ 2 45.80	39	46	+0.18	.....	.....
July 6	6252	N	13 57	.....	48	26	.....	.....	49 39 27.55
	6322	S	5 33	+ 8 24	27	46	+0.03	.....	23 30 52.76
July 8	6257	N	10 36.10	.....	47	27			
	6322	S	2 34.50	— 8 1.60	34	40	+0.14	.....	.....

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 13 40.29						
36 36 50.14	+ 1 14.90	+1.43	+0.02		36 38 06.54	Observatory 331 feet north of station, 866 +850. 331 feet = 3″.27.
	+ 1 15.91	+0.71	+0.02		6.83	
	+ 1 12.69	+3.66	+0.02		16.56	
73 11 32.88						
36 35 46.44	+ 2 24.17	+2.37	+0.04		13.02	
	+ 2 25.16	+0.47	+0.04		12.11	
73 13 27.97						
36 36 43.98	+ 1 27.16	—1.42	+0.03		9.75	
	+ 1 24.07	+1.66	+0.03		9.74	Micrometer corrected, 5 T. S.
73 14 18.05						
36 37 09.02	+ 1 02 83	—1.19	+0.02		10.68	
	+ 0 57.55	+2.61	+0.02		9.20	
73 17 20 82						
36 38 40.41	— 0 30.42	+0.95	+0.01		10.93	
73 01 33.43						
36 30 41.72	+ 7 26.06	+2.37	+0.12		15.27	
73 14 25.79						
36 37 12.89	+ 0 56.22	+1.19	+0.02		10.32	
	+ 0 53.83	+4.27	+0.02		11.01	
73 10 20.31						
36 35 10.15	+ 3 00.46	+0.72	+0.05		11.38	
	+ 2 55.55	+3.32	+0.05		9.07	

LATITUDE OBSERVATORY—CAMP NEAR BLACK-JACK, ON L. & N. TURNPIKE.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
	6335	N	8 9.50		38				52 00 38.50
July 6				+ 0 15.20			+0.10		
	6372	N	4 4.95		40	35			52 03 53.18
	6438	S	8 8.02	— 4 30.70	41	33	+0.13		21 15 37.78
	6335	N	9 55.90		45	30			
July 8				— 0 21.90			+0.20		
	6572	N	5 29.10		45	30			
	6335	S	9 7.78	— 4 48.70	40	35	+0.20		
	6472	N	6 6.14		35	40			41 25 26.75
July 6	6497	S	15 22.80	— 8 6.14	45	29	+0.11		31 57 05.14
	6473	N	5 45.60		42	33			
July 8	6497	S	14 23.60	— 8 7.80	42	32	+0.19		
	6530	N	15 6.41		52	22			52 03 27.74
July 6	6574	S	24 46.50	— 8 8.24	29	46	+0.13		21 19 12.91
	6530	N	8 27.10		45	29			
July 8	6574	S	17 21.50	— 8 9.74	37	37	+0.16		
	6623	N	16 6.42		46	27			53 06 31.92
July 6	6652	S	3 14	+13 50.20	33	41	+0.11		19 59 50.88
	6623	N	16 7.80		57	17			
July 8	6652	S	2 6.01	+13 47.70	28	46	+0.22		
	6714	S	21 12.40		28	46			29 09 19.09
July 5	6731	N	1 16	—22 28.40	52	22	+0.12		44 23 08.47
	6714	S	22 46.80		36	38			
July 8	6731	N	1.90	—22 48.70	47	37	+0.08		
	6827	S	17 55.40		23	50			23 42 57.67
July 6	6895	N	4 54.90	—13 0.50	56	18	+0.11		49 42 47.41
	6827	S	18 5.60		42	37			
July 5	6895	N	4 9.20	—13 13.60	47	29	+0.23		

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 16 15.83						
36 38 07.91	+ 0 03.32	+2.37	0.00	.....	36 38 13.60	
73 19 30.96						
36 39 45.48	— 1 34.32	+3.09	—0.02	.....	14.23	
.....	— 0 04.80	+4.75	0.00	.....	7.86	
.....	— 1 38.37	+4.75	+0.03	.....	11.93	
73 22 31.89						
36 41 15.94	— 3 08.65	+2.61	+0.05	.....	9.85	
.....	— 3 12.28	+4 61	—0.05	.....	8.22	
73 22 40.65						
36 41 20.32	— 3 13.25	+3.09	—0.05	.....	10.11	
.....	— 3 15.87	+3.80	—0.05	.....	8.20	
73 06 22.80						
36 33 11.40	+ 4 55.69	+2.61	+0.10	.....	10.30	
.....	+ 4 55.15	+5.22	+0.10	.....	12.37	
73 32 27.56						
36 46 13 78	— 8 08.02	+2.85	—0.14	.....	8.47	
.....	— 8 12.47	+1.90	—0.14	.....	.....	Level disturbed. Observation rejected.
73 25 45.08						
36 42 52.59	— 4 44.81	+2.61	—0.08	.....	10.26	
.....	— 4 47.68	+5.46	—0.08	.....	10.24	

LATITUDE OBSERVATORY—CAMP NEAR BLACK-JACK, ON L. & N. TURNPIKE

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
July 5	6979	S	6 12	----------	45	33	--------	------	24 14 27.20
	7062	N	15 42.30	+ 9 30.30	47	32	+ 0.27	------	48 55 00.17
July 6	6979	S	7	----------	41	34			
	7062	N	16 33.60	+ 9 30.60	42	34	+ 0.15	------	----------
July 8	6979	S	5 8.88	----------	29	47			
	7062	N	15 14.10	+ 9 25.30	59	16	+ 0.25	------	----------
July 5	7143	S	17 57.60	----------	42	37	--------	------	23 37 28.34
	7182	N	1 8.16	—15 7.60	50	27	+ 0.28	------	49 50 03.30
July 6	7143	S	18 57.80	----------	37	39			
	7182	N	2 8.49	—15 7.29	48	27	+ 0.19	------	----------
July 8	7143	S	18 42	----------	42	34			
	7182	N	3 17	—15 25	24	52	— 0.20	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 09 27.37						
36 34 43.69	+ 3 23.74	+6.41	+0.05	-------	36 38 13.90	
----------	+ 3 24.46	+3.56	+0.05	-------	11.77	
----------	+ 3 22.64	+5.94	+0.06	-------	12.33	
73 27 31.64						
36 43 45.82	— 5 45.14	+6.65	—0.10	-------	7.23	
----------	— 5 44.47	+4.51	—0.10	-------	5.76	
----------	— 5 33.97	—3.80	—0.10	-------	7.95	
Mean of 34 observations ----------					36 38 10.21	
Observatory north of the line ----------					3.27	
Latitude of station 866+850 ----------					36 38 6.94	

thence S. 88° 19′ E., to station 892+213; thence S. 88° 2′ E., to station 897+903; thence S. 89° 40′ E., to station 901+559; thence S. 89° 8′ E., to station 905+502; thence S. 87° 39′ E., to station 910+483; thence S. 88° 5′ E., to station 918+635, passing stone No. 34; thence S. 88° 13′ E., to station 927+928; thence S. 88° 31′ E., to station 929+288; thence S. 87° 18′ E., to station 935+811; thence S. 83° 5′ E., to station 942+387; thence S. 84° 14′ E., passing stone No. 35, to station 947+111; thence S. 86° 8′ E., to station 954+019; thence S. 84° 56′ E., passing large stone on Nashville and Glasgow turnpike, to station 958+582; thence S. 85° 17′ E., to station 964+088; thence S. 86° 13′ E., to station 967+751; thence S. 85° 37′ E., to station 971+804; thence S. 85° 40′ E., passing stone No. 36, to station 975+039; thence S. 86° 39′ E., to station 978+405; thence S. 85° 9′ E., to station 984+655; thence S. 88° 27′ E., to station 986+152; thence S. 86° 20′ E., to station 997+314; thence S. 87° 6′ E., to station 998+807, at stone No 37; thence S. 87° 3′ E., to station 1008+852;

943 + 943

36°38'43"32 No. 35 948 + 207

36°39'13"28

No. 33 884 + 596

Drake's Cr.

Var. 7°32' E.

Nash & Lou. pike

955 + 563

36°38'38"27

SUMNER

SIMPSON

PALMYRA

Little Trammell Brg.

Sulphur Spr.

36°38'25"58 No. 36 973 + 013

Summer & Macon Cos.

Trammell Brg.

36°39'53"33

No. 34 912 + 943 Cor. Allen & Simpson

Var. 8°00' E.

MACON

ALLEN

NEW ROW

Middle Fork

Long Cr.

36°38'08"47 No. 37 998 + 807

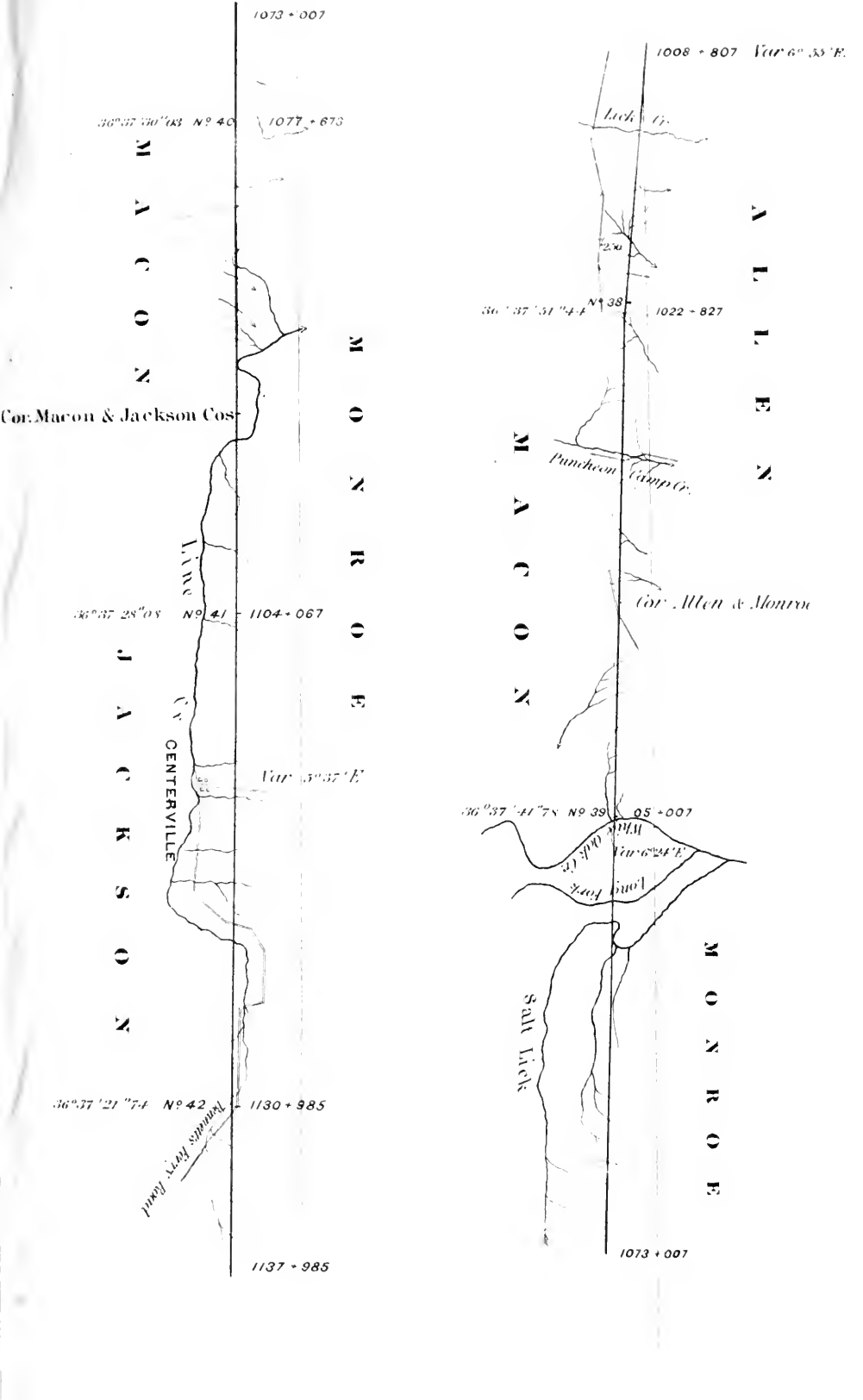
943 + 943

1008 + 807

ALLEN

Map No. 10.

thence S. 85° 3′ E., to station 1012+618; thence S. 86° 2′ E., to station 1014+427; thence S. 82° 8′ E., to station 1018+104; thence S. 87° 14′ E., passing stone No. 38, to station 1027+678; thence S. 88° 8′ E., to station 1033+997; thence N. 89° 27′ E., to station 1036+143; thence S. 87° 51′ E., to station 1050+395; thence S. 87° 9′ E., to station 1053+164, passing stone No. 39; thence S. 87° 24′ E., passing stone No. 40, to station 1081+944; thence N. 88° 36′ E., to station 1092+355; thence S. 89° 17′ E., to station 1100+366; thence S. 88° 29′ E., passing stone No. 41, to station 1108+262; thence N. 86° 41′ E., to station 1109+955; thence S. 88° 29′ E., to station 1129+562; thence S. 87° 52′ E., passing stone No. 42, to station 1130+985;


1073 + 007
36°37'30"08 N° 40
1077 + 673
MACON
MONROE
Cor. Macon & Jackson Cos.
Line
36°37'28"08 N° 41
1104 + 067
CENTERVILLE
Var. 5°37' E.
36°37'21"74 N° 42
1130 + 985
Tennis Ft's Road
1137 + 985
1008 + 807 Var 6° 35' E.
Lick Cr.
36°37'31"44 N° 38
1022 + 827
ALLEN
Pumpkin Camp Cr.
Cor. Allen & Monroe
36°37'41"78 N° 39
05 + 007
Var. 6°24' E.
Salt Lick
1073 + 007

Map No. 11.

LATITUDE OBSERVATORY—CAMP ON LONG FORK OF BARREN RIVER.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Aug. 19	5902	N	21 55.70	----------	32	36	--------	37	57 08 36.98
	5991	S	13 23.50	+ 8 32.20	50	18	+0.28	37	16 01 15.91
Aug. 19	6052	N	23 7.10	----------	38	31	--------	------	50 49 07.93
	6134	S	3 51.50	+20 19.50	21	48	—0.20	------	22 12 43.93
Aug. 19	6052	N	23 7.58	----------	42	33			
	6134	S	4 9	+19 6.68	38	38	+0.09	------	----------
Aug. 19	6162	N	15 32	----------	40	27	--------	------	43 26 57.71
	6237	S	12 7.27	+ 2 59.30	13	53	—0.27	------	29 47 48.54
Aug. 19	6162	N	15 16.50	----------	36	33			
	6237	S	12 8.20	+ 2 34.50	20	49	—0.26	------	----------
Aug. 19	6162	N	15 6.41	----------	36	39			
	6237	S	13 7.62	+ 1 8.79	45	32	+0.10	------	----------
Aug. 19	6252	N	14 47.10	----------	32	34	--------	------	49 39 39.29
	6322	S	6 37.40	+ 8 9.70	20	46	—0.28	------	23 31 01.74
Aug. 19	6252	N	17 32.10	----------	40	29			
	6322	S	9 44.10	+ 7 8.80	18	51	—0.22	------	----------
Aug. 19	6252	N	17 42	----------	43	33			
	6322	S	9 8.75	+ 7 54.50	37	40	+0.07	------	----------
Aug. 18	6395	N	6 7.85	----------	41	22	--------	------	55 24 01.65
	6397	S	20 3	—13 24.50	24	40	+0.03	21	18 01 45.98
Aug. 19	6395	N	7 9.59	----------	30	39			
	6397	S	21 28	—13 32.10	40	29	+0.02	17	----------
Aug. 20	6395	N	7 51	----------	36	30			
	6397	S	20 7.84	—13 27.40	37	26.5	+0.16.5	------	----------
Aug. 17	6493	N	9 7.52	----------	40	28	--------	------	41 25 38.87
	6497	S	18 8.51	— 9 9.90	33	35	+0.10	------	31 57 15.02
Aug. 19	6473	N	8 6	----------	32	38			
	6497	S	17 10.10	— 9 4.10	36	34	—0.04	------	----------
Aug. 20	6473	N	8 17	----------	38	38			
	6497	S	17 26.90	— 9 9.90	36	41	—0.05	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 09 52.89						Observatory 2719 feet
36 34 56.44	+ 3 02.25	+6.65	+0.03	+0.34	36 38 05.75	north of station 1053
73 01 51.91						+157 2719 feet =
36 30 55.95	+ 7 22.27	—4.75	+0.13	--------	13.60	26″.89.
----------	+ 7 10.73	+2.14	+0.13	--------	8.95	
72 74 46.25						
36 37 23.12	+ 0 56.79	—6.41	+0.02	--------	12.52	
----------	+ 0 51.35	—6.17	+0.02	--------	8.20	Micrometer corrected, 10, T. S.
----------	+ 0 41.05	+2.37	+0.02	--------	6.66	
72 70 41.03						
36 35 20.51	+ 2 57.32	—6.65	+0.05	--------	11.23	
----------	+ 2 52.57	—5.22	+0.05	--------	7.91	
----------	+ 2 45.23	+1.66	+0.05	--------	7.45	
73 25 47.63						
36 42 53.91	+ 4 50.06	+0.71	—0.08	+0.07	4.45	
----------	— 4 51.73	+0.47	—0.08	+0.05	2.52	
----------	— 4 50.70	+3.92	—0.08	--------	6.95	
72 82 53.89						
36 41 26.94	— 3 19.27	+2.37	—0.06	--------	10.10	
----------	— 3 18.00	—0.95	—0.06	--------	7.93	
----------	— 3 19.27	—1.19	—0.06	--------	6.42	

LATITUDE OBSERVATORY—CAMP ON LONG FORK OF BARREN RIVER.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Aug. 17	6530	N	14 27.20	----------	39	29	-------	------	52 03 41.00
	6574	S	23 50.30	— 9 23.10	35	33	—0.12	------	21 19 22.46
Aug. 19	6530	N	14 47	----------	39	31			
	6574	S	23 7.35	— 9 26.50	30	40	—0.02	------	----------
Aug. 20	6530	N	9 6.09	----------	36	41			
	6574	S	18 9.35	— 9 32.60	42	36	+0.01	------	----------
Aug. 19	6583	N	12 6.50	----------	32	38	-------	------	56 37 24.81
	6642	S	14 28.60	— 1 6.36	34	37	—0.09	------	16 40 07.61
	----	----	----------	----------	-------	-------	-------	------	----------
	6647	S	15 7.95	— 3 14.50	34	37	—0.09	------	16 41 20.58
Aug. 20	6583	N	11 38	----------	51	26			
	6642	S	13 10.60	— 1 7.26	26	52	—0.01	------	------- ----
	6647	S	14 6.65	— 3 28.50	26	52	—0.01	------	----------
Aug. 19	6714	S	25 9.07	----------	36	32	-------	12	29 09 30.43
	6731	N	3 15.10	—22 7.56	32	36	0	------	44 23 21.90
Aug. 19	6714	S	23 8.77	----------	30	40			
	6731	N	1 10.80	—22 6.69	40	30	0	------	----------
Aug. 20	6714	S	26 10	---- ----	36	42			
	6731	N	3 42.80	—22 6.72	42	36	0	------	----------
Aug. 18	6839	S	20 9.12	----------	42	25	-------	------	16 16 15.54
	6847	N	8 9.90	—12 8.13	29	38	+0.08	------	57 09 31.49
Aug. 19	6839	S	20 6.54	----------	37	35	-------	10	
	6847	N	7 8.61	—12 7.93	32	40	—0.06	------	----------
Aug. 20	6839	S	20 15.50	----------	43	36			
	6847	N	7 40.90	—12 7.46	34	45	—0.04	30	----------
Aug. 18	6863	N	2 7.18	----------	36	31	-------	9	57 55 00.46
	6890	S	23 6.19	—20 9.01	34	32	+0.07	------	15 38 30.20
Aug. 19	6863	N	3 7.79	----------	40	31	-------	8	
	6890	S	24 56.50	—20 7.86	29	43	+0.05	4	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 23 03.46						
36 41 31.73	— 3 22.16	+2.85	—0.06	.....	36 38 12.36	
.....	— 3 22.90	—0.47	—0.06	.....	8.30	Micrometer corrected 5 T. S.
.....	— 3 24.24	+0.24	—0.06	.....	7.67	
73 17 32.42						
36 38 46.21	— 0 35.83	—2.14	—0.01	.....	8.23	
72 78 45.39						
36 39 22.69	— 1 08.88	—2.14	—0.01	.....	11.66	
.....	— 0 37.80	—0.24	—0.01	.....	8.16	
.....	— 1 11.94	—0.24	—0.01	.....	10.50	
73 32 52.33						
36 46 26.16	— 8 18.36	.....	—0.15	+0.01	7.66	
.....	— 8 18.45	.....	—0.15	.....	9.56	
.....	— 8 16.52	.....	—0.15	.....	9.49	
73 25 47.03						
36 42 53.51	— 4 40.60	—1.90	—0.09	.....	14.72	
.....	— 4 40.17	—1.42	—0.09	+0.01	11.84	
.....	— 4 39.14	—0.95	—0.09	+0.24	13.63	
73 31 30.66						
36 45 45.33	— 7 37.73	+1.66	—0.14	+0.02	9.14	
.....	— 7 35.21	—1.19	—0.14	+0.01	8.80	

LATITUDE OBSERVATORY—CAMP ON LONG FORK OF BARREN RIVER.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Aug. 20	6863	N	3 10.70	----------	32	46	----------	------	57 53 00.46
	6890	S	23 8.80	—20 7.73	46	33	—0.01	------	15 38 30.20
Aug. 18	6944	S	15 19.80	----------	35	33	----------	------	16 03 51.86
	6983	N	8 55.60	— 6 6.42	37	30	+0.09	------	57 17 13.04
Aug. 19	6944	S	16 6.80	----------	37	35			
	6983	N	10 5.50	— 6 57.20	35	37	0	------	----------
Aug. 20	6944	S	16 31.20	----------	41	38			
	6983	N	9 7.54	— 6 55.80	35	44	—0.06	------	----------
Aug. 18	7143	S	20 43.70	----------	23	44	----------	11	23 37 40.30
	7182	N	4 21.80	—16 21.90	50	18	+0.11	------	49 50 18.33
Aug. 19	7143	S	21 38	----------	31	42			
	7182	N	5 19.90	—16 18.10	42	31	0	------	----------
Aug. 20	7143	S	22 6.52	----------	40	39			
	7182	N	6 5.02	—16 15	36	42	—0.05	------	----------
Aug. 19	7373	S	23 11.80	----------	44	29	----------	------	36 03 27.75
	7385	N	3 6.42	—19 47.60	29	45	—0.01	------	37 27 01.34
Aug. 20	7373	S	23 29.60	----------	45	34			
	7385	N	3 7.05	—19 59.10	32	47	—0.04	26	----------
Aug. 18	7398	N	19 44.10	----------	35	34	----------	14	38 48 34.59
	7399	S	7 20.29	+12 23.90	35	34	+0.02	40	34 18 39.80
Aug. 19	7398	N	19 7.47	----------	29	45	----------	30	
	7399	S	7 52	+12 22.70	45	29	0	38	----------
Aug. 20	7398	N	18 34.90	----------	30	50			
	7399	S	6 16	+12 18.90	49	31	—0.02	60	----------
Aug. 19	7512	N	8 6.09	----------	35	40	----------	------	51 04 30.39
	7585	S	17 7.62	— 9 15.30	41	33	+0.03	------	22 18 23.16
Aug. 20	7512	N	8 59.50	----------	47	33			
	7585	S	17 59	— 8 9.95	34	47	+0.01	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 31 30.66						
36 45 45.33	−7 34.93	−0.24	−0.14	.....	36 38 10.02	
73 21 04.90						
36 40 32.45	−2 25.46	+2.14	−0.03	.....	9.10	
.....	−2 23.99	.....	−0.03	.....	8.43	
.....	−2 23.62	−1.42	−0.03	.....	7.38	
73 27 58.63	.....	.....	.....	.....	.....	Just in meridian—Star to one side.
36 43 59.31	−5 55.20	+2.61	−0.10	+0.01	6.73	
.....	−5 54.36	0	−0.10	.....	4.85	
.....	−5 53.68	−1.42	−0.10	.....	4.11	
73 30 29.09						
36 45 14.54	−7 06.52	−0.24	−0.12	.....	7.66	
.....	−7 09.04	−0.95	−0.12	+0.18	4.61	
72 66 74.39						
36 33 37.19	+4 28.03	+0.47	+0.08	+0.23	6.00	
.....	+4 27.77	0	+0.08	+0.30	5.34	
.....	+4 26.94	−0.47	+0.08	+0.46	4.20	
73 22 53.55						
36 41 26.77	−3 20.45	+0.71	−0.05	.....	6.98	
.....	−3 16.99	+0.24	−0.05	.....	9.97	

LATITUDE OBSERVATORY—CAMP ON LONG FORK OF BARREN RIVER.

Date.	Star. No. B.A C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Aug. 19	7798	S	20 8.99	----------	42	33	----------	------	27 37 37.79
	7800	N	5 39	—15 50.90	32	43	—0.02	40	45 49 55.58
Aug. 20	7798	S	21 9.91	----------	42	39	----------	25	
	7800	N	6 54	—15 45.10	32	48	—0.13	20	----------
Aug. 19	7923	S	8 03.20	----------	39	36	----------	------	29 29 23.40
	7948	N	10 8.26	— 2 20.60	37	38	+0.02	------	43 48 27.24
Aug. 20	7923	S	15 11.80	----------	42	39			
	7948	N	12 9.10	— 2 20.80	37	44	—0.04	------	----------
Aug. 19	7958	S	7 7.70	----------	42	33	----------	------	23 51 48.85
	8036	N	17 37.40	+ 9 6.04	34	42	+0.01	------	49 17 20.01
Aug. 20	7958	S	9 37.90	----------	57	24			
	8036	N	19 5.50	+ 9 6.76	23	59	—0.03	------	----------
Aug. 19	8058	N	21 3	----------	38	38	----------	------	45 37 48.24
	8097	S	8 26	+12 7.70	38	38	0	------	27 29 09.05
Aug. 20	8058	N	21 34.20	----------	30	51			
	8097	S	8 49.40	+12 8.48	48	33	—0.06	------	----------
Aug. 19	8141	S	8 57.50	----------	37	38	----------	------	31 02 45.56
	8171	N	15 37.50	+ 7	39	37	+0.01	------	42 08 25.49
Aug. 20	8141	S	8 31	----------	43	39			
	8171	N	15 52.60	+ 7 21.60	34	48	—0.10	------	----------
Aug. 19	8248	S	20 19	----------	40	36	----------	------	15 33 30.83
	8268	N	7 4	—13 15	35	42	—0.03	------	57 52 11.74
Aug. 20	8248	S	19 6.39	----------	42	40			
	8268	N	6 6.80	—12 9.59	33	48	—0.13	------	----------
Aug. 19	8299	S	14 8.15	----------	41	36	----------	------	18 20 37.27
	8322	N	14 9.94	+ 17.90	35	42	—0.02	------	54 55 26.06
	8330	N	11 4.20	— 3 7.73	35	42	—0.02	------	54 58 22.15

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 27 33.37						
36 43 46.68	—5 39.65	—0.47	—0.10	+0.22	36 38 06.68	
	—5 38.38	—3.09	—0.10	+0.13	5.24	
73 17 50.64						
36 38 55.32	—0 48.31	+0.47	0		7.48	Micrometer 5 T. S. wrong.
	—0 48.36	—0.95	0		6.01	
73 09 08.86						
36 34 34.43	+3 30.33	+0.24	+0.56		5.06	
	+3 31.90	—0.71	+0.06		5.68	
73 06 57.29						
36 33 28.64	+4 39.66	0	+0.07		8.37	
	+4 41.37	—1.42	+0.07		8.66	
73 11 11.05						
36 35 35.52	+2 33.30	+0.24	—0.03		9.09	
	+2 38.03	—2.37	—0.03		11.21	
73 25 42.57						
36 42 51.28	—4 47.98	—0.71	—0.09		2.50	
	—4 43.80	—3.09	—0.09		4.30	
73 16 03.32						
36 38 01.66	+0 03.92	—0.47	0		4.61	
36 39 29.71	—1 22.63	—0.47	—0.03		6.58	

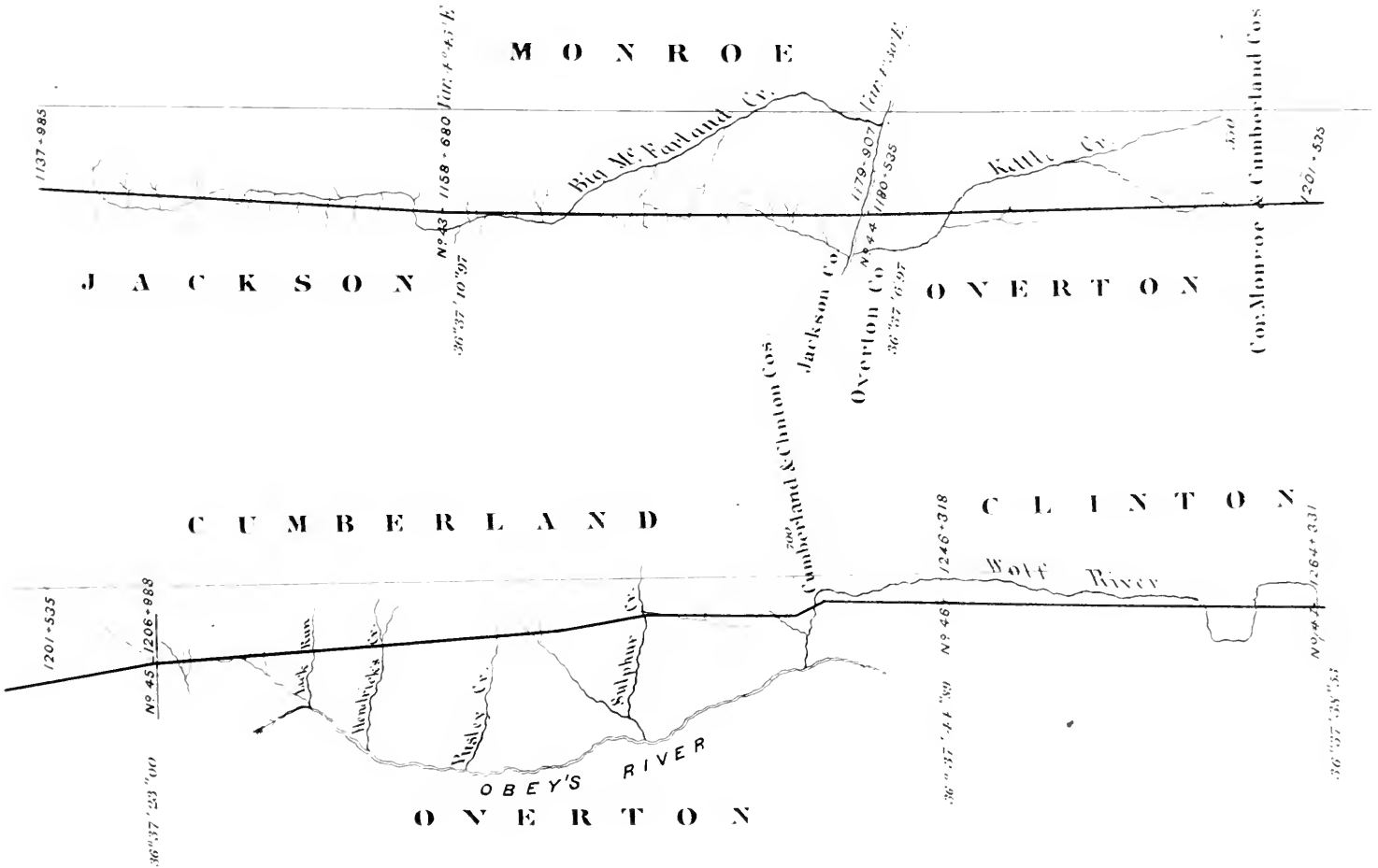
LATITUDE OBSERVATORY—CAMP ON LONG FORK OF BARREN RIVER.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Aug. 20	8299	S	13 6.50	----------	44	38	--------	------	18 20 37.27
	8322	N	13 9.32	— 0 28.20	35	47	—0.06	------	54 55 26.05
	8330	N	9 9.66	— 3 6.84	34	48	—0.08	------	54 58 22.15
Aug. 19	58	S	10 8.84	----------	41	36	--------	------	36 00 28.50
	67	N	16 6.40	+ 5 7.56	39	38	+0.06	------	37 11 33.39
Aug. 20	58	S	10 49.90	----------	41	41			
	67	N	15 9.48	+ 5 44.90	37	45	—0.10	------	----------
Aug. 20	121	N	7 7.24	----------	31	51	--------	------	53 44 48.75
	130	S	7 7.88	— 0 6.40	45	36	+0.11	------	19 31 22.75
Aug. 19	153	N	1 54.30	----------	45	43	--------	------	53 07 25.87
	168	S	27 7	—28 6.13	31	46	—0.13	------	20 29 47.64
Aug. 20	201	N	12 8	----------	39	42	--------	------	54 27 05.01
	214	S	12 33.90	+ 0 46.10	40	42	—0.05	------	18 48 47.53
Aug. 19	201	N	13 16.10	----------	43	34			
	214	S	12 57.90	+ 0 58.20	34	44	—0.01	------	----------
Aug. 19	235	N	6 6.20	----------	42	35	--------	------	50 48 22.73
	264	S	22 8.12	—16 19.20	34	43	—0.02	------	22 39 43.82
Aug. 20	235	N	5 56.50	----------	42	40			
	264	S	21 7.75	—16 21	37	46	—0.07	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

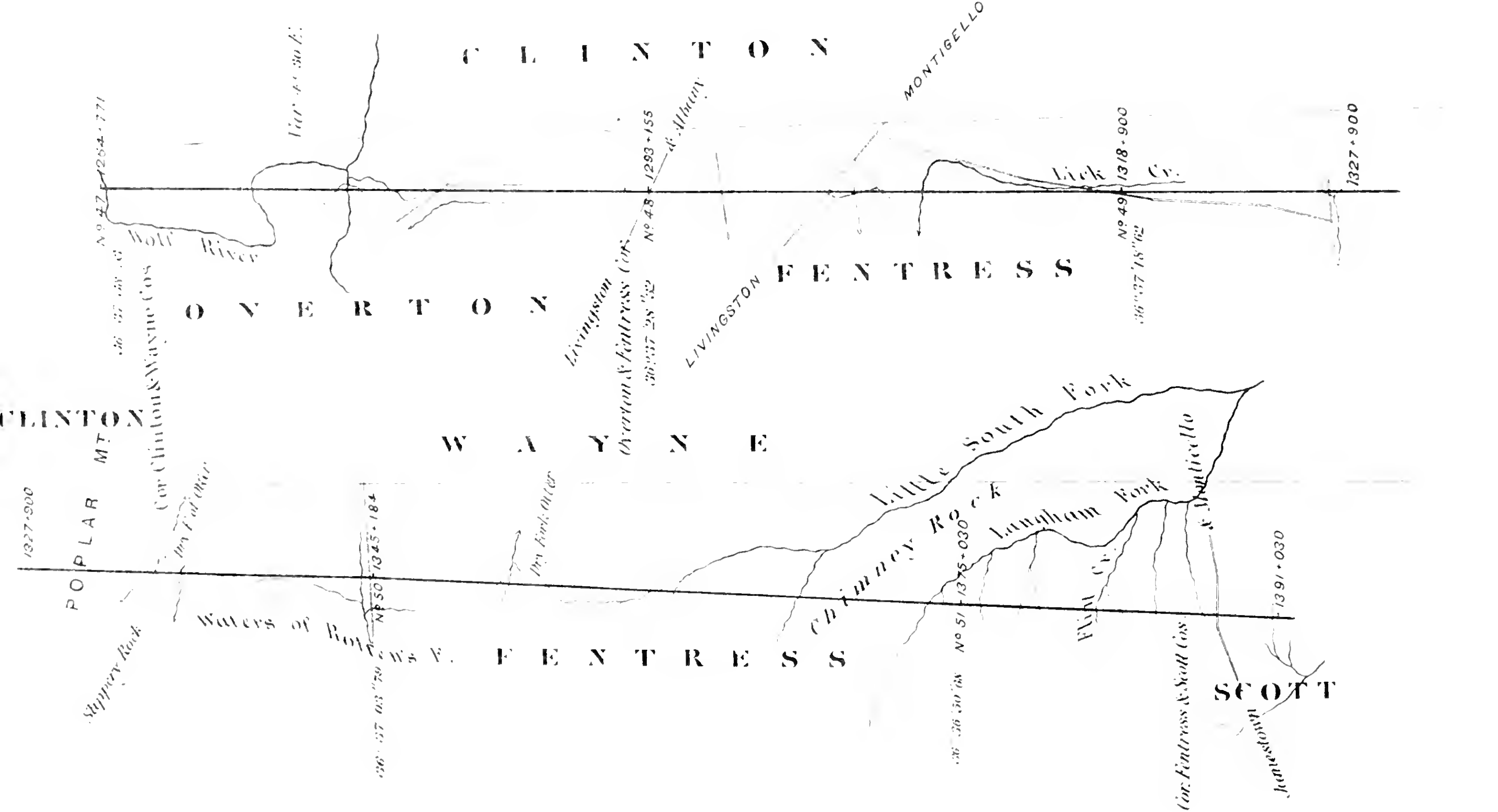
Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 16 03.32						
36 38 01.66	+ 0 06.18	—1.42	0	-------	36 38 05.92	
36 39 29.11	— 1 20.68	—1.90	—0.03	-------	10.90	
73 12 01.89						
36 36 00.94	+ 2 06.06	+1.42	+0.01	-------	8.43	
----------	+ 1 59.33	—1.90	—0.01	-------	----------	(Dim.) Rejected.
73 16 11.50						
36 38 05.75	— 0 01.40	—2.61	0	-------	1.74	
73 37 13.51						
36 48 36.75	—10 26.62	—2.85	—0.18	-------	7.10	
73 15 52.54						
36 37 56.27	+ 0 10.12	—1.19	0	-------	5.20	
----------	+ 0 12.75	—0.24	0	-------	8.78	
73 28 06.55						
36 44 03.27	— 5 54.60	—0.48	—0.11	-------	8.08	
----------	— 5 55.00	—1.66	—0.11	-------	6.50	
Mean of 67 observations					36 38 07.65	
Observatory north of line					26.89	
Latitude of station 1053+157					36 37 40.76	

same course continued, passing stone No. 43, to station 1159+044; thence S. 89° 23′ E., to station 1165+889; thence N. 89° 12′ E., to station 1177+670; thence S. 79° 53′ E., passing small stone at station 1179+907, on the west bank of Cumberland river, to stone No. 44, at station 1180+535; thence N. 87° 19′ E., to station 1203+306; thence N. 79° 21′ E., to stone No. 45, at station 1206+988; thence N. 87° 21′ E., to station 1222+383; thence N. 89° 21′ E., to station 1223+758; thence N. 87° 21′ E., to station 1228+654; thence N. 80° 21′ E., to station 1232+088; thence S. 89° 09′ E., to station 1239+104; thence N. 70° 36′ E., to station 1241+124; thence S. 88° 39′ E., to stone No. 46, at station 1246+318; thence S. 88° 24′ E., to station 1248+594; thence S. 87° 59′ E., to station 1251+723, passing stone No. 47,


MONROE
JACKSON
OVERTON
CUMBERLAND
CLINTON
OVERTON
1137+985
1158+680
No 43
36°37'10"97
Big McFarland Cr.
1179+907
1180+535
No 44
36°37'6"97
Kettle Cr.
1201+533
Cor: Monroe & Cumberland Cos
Jackson Co
Overton Co
Cumberland & Clinton Cos
1201+535
1206+988
No 45
36°37'23"00
Rock Run
Hendricks Cr.
Pigeon Cr.
Sulphur Cr.
OBEY'S RIVER
1246+318
No 46
36°37'44"99
Wolf River
1264+331
No 47
36°37'53"53

Map No. 12.

to station 1272+688; thence S. 87° 18′ E., to station 1275+958; thence S. 88° 30′ E., to station 1277+938; thence S. 88° E., to station 1285+750; thence S. 87° 45′ E., to station 1291+058; thence S. 87° E., passing stone No. 48, to station 1297+045; thence S 88° E., to station 1307+584; thence S. 87° 45′ E., passing stone No. 49, to station 1328+850; thence S. 85° 30′ E., to station 1342+320; thence S. 87° 30′ E., passing stone No. 50, to station 1353+385; thence S. 86° 30′ E., to station 1356+650; thence S. 87° 30′ E., passing stone No. 51 to station


CLINTON
OVERTON
WAYNE
FENTRESS
FENTRESS
CLINTON
SCOTT
POPLAR MT.
Cor. Clinton & Wayne Cos.
Wolf River
Var. 4° 30 E.
No 47 1264 + 771
No 48 1293 + 155
36°37′28″32
Livingston
Overton & Fentress Cos.
& Albany
LIVINGSTON
MONTIGELLO
Lick Cr.
No 49 1318 + 900
36°37′18″62
1327 + 900
1327 + 900
Slippery Rock
Waters of Rotrews F.
No 50 1345 + 184
Dry Fork Otter
Little South Fork
Chimney Rock
Laughan Fork
Flint Cr.
No 51 1375 + 030
& Monticello
Cor. Fentress & Scott Cos.
Jamestown
1391 + 030

Map No. 13.

LATITUDE OBSERVATORY—CAMP NEAR BENJAMIN HARRISON'S.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Sept. 9	6473	N	8 27.10	----------	31.5	38.0	--------	------	41 25 42.31
	6497	S	18 8.42	—10 57.10	39.0	31.0	+ 1.5	------	31 57 19.23
Sept. 9	6583	N	10 44	----------	39.8	31.0	--------	------	56 37 28.83
	6642	S	13 8.10	— 3 37	37.2	33.4	+12.6	------	16 40 10.08
	6647	S	15 34.20	— 4 9.02	37.2	33.4	+12.6	------	16 41 20.51
Sept. 9	6839	S	21 9.85	----------	40.5	30.5	--------	------	16 16 08.28
	6847	N	7 6.79	—14 30.60	31.5	39.0	+ 2.5	------	57 09 36.64
Sept. 9	6863	N	1 6.86	----------	41.4	29.1	--------	------	57 53 04.37
	6890	S	24 1.90	—22 33.30	26.6	43.5	— 4.6	------	15 38 32.95
Sept. 9	6944	S	16 44	----------	34.8	36.5	--------	------	26 03 55.53
	6983	N	8 38	— 8 6.60	35.2	36.2	— 2.7	------	47 12 17.17
	7060	N	8 6.40	----------	35.0	37.2	--------	8.0	59 08 42.24
Sept. 9	7107	S	16 0.80	— 7 36.80	38.0	33.8	+ 2.0	------	14 11 42.27
	7121	S	9 12.60	— 0 48.60	38.0	33.8	+ 2.0	------	14 06 43.49
Sept. 9	7143	S	23 7.21	----------	49.0	28.0	--------	------	23 37 44.22
	7182	N	6 0.50	—17 7.16	24.0	48.0	+ 2.0	------	49 56 24.32
	7246	S	26 14	----------	40.0	32.0	--------	------	26 34 39.23
Sept. 9	7268	N	9 15.60	—16 9.84	33.2	39.4	+ 1.8	------	46 53 22.34
	7301	N	1 45.10	—24 6.89	33.8	38.0	+ 3.8	------	46 58 29.43
	7373	S	24 2.10	----------	32.0	40.0	--------	------	36 03 36.90
Sept. 9	7383	N	2 7.23	—21 27.80	47.0	25.0	+14.0	28.5	47 27 06.64
	7512	N	8 7.69	----------	43.5	29.8	--------	------	51 04 36.77
Sept. 9	7585	S	19 38.80	—10 6.19	35.0	38.0	+10.7	------	22 18 27.32
	7798	S	22 27.90	----------	45.0	27.0	--------	19.0	27 37 42.64
Sept. 8	7800	N	5 6.51	—16 6.28	06.0	66.0	—42.0	25.0	45 50 01.95
	7798	S	22 28.10	----------	39.0	34.5	--------	15.0	----------
Sept. 9	7800	N	5 21.40	—17 6.90	36.1	37.4	+ 3.2	15.5	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 23 01.54	----------	--------	--------	--------	----------	Observatory north of station 1275+938. 381 feet. 381 feet =3″.77.
36 41 30.77	— 3 51.50	+0.36	—0.08	--------	37 37 39.52	
73 17 38.91						
36 38 49.40	— 1 13.80	+2.94	—0.02	--------	38.63	
73 18 49.34						
36 39 24.67	— 1 47.35	+2.99	—0.03	-------	40.28	
73 25 44.92						
36 42 52.46	— 5 13.30	+0.59	—0.10	--------	39.65	
73 31 37.32						
36 45 48.66	— 8 09.09	—1.09	—0.15	--------	38.33	
73 21 12.70						
36 40 36.35	— 2 56.51	—0.64	—0.05	--------	39.15	
73 20 24.51						
36 40 12.25	— 2 41.36	+0.47	—0.06	--------	31.30	
73 15 25.73						
36 37 42.86	— 0 10.64	+0.47	—0.00	--------	32.69	
73 28 08.54						
36 44 04.27	— 6 27.98	+0.47	—0.10	+0.02	36.68	
73 28 00.57						
36 44 00.28	— 6 11.94	+0.43	—0.10	--------	----------	Rejected
73 33 08.66						
36 46 34.33	— 9 00.54	+0.90	—0.10	--------	34.59	
73 30 39.54						
36 45 19.77	— 7 46.43	+3.32	—0.12	+0.11	36.65	
73 23 04.09						
36 41 32.04	— 5 52.56	+2.54	—0.07	--------	41.95	
73 27 44.59						
36 43 52.29	—61 04.15	+9.97	—0.10	+0.12	38.19	
----------	— 6 13.77	—0.76	—0.10	+0.05	39.24	

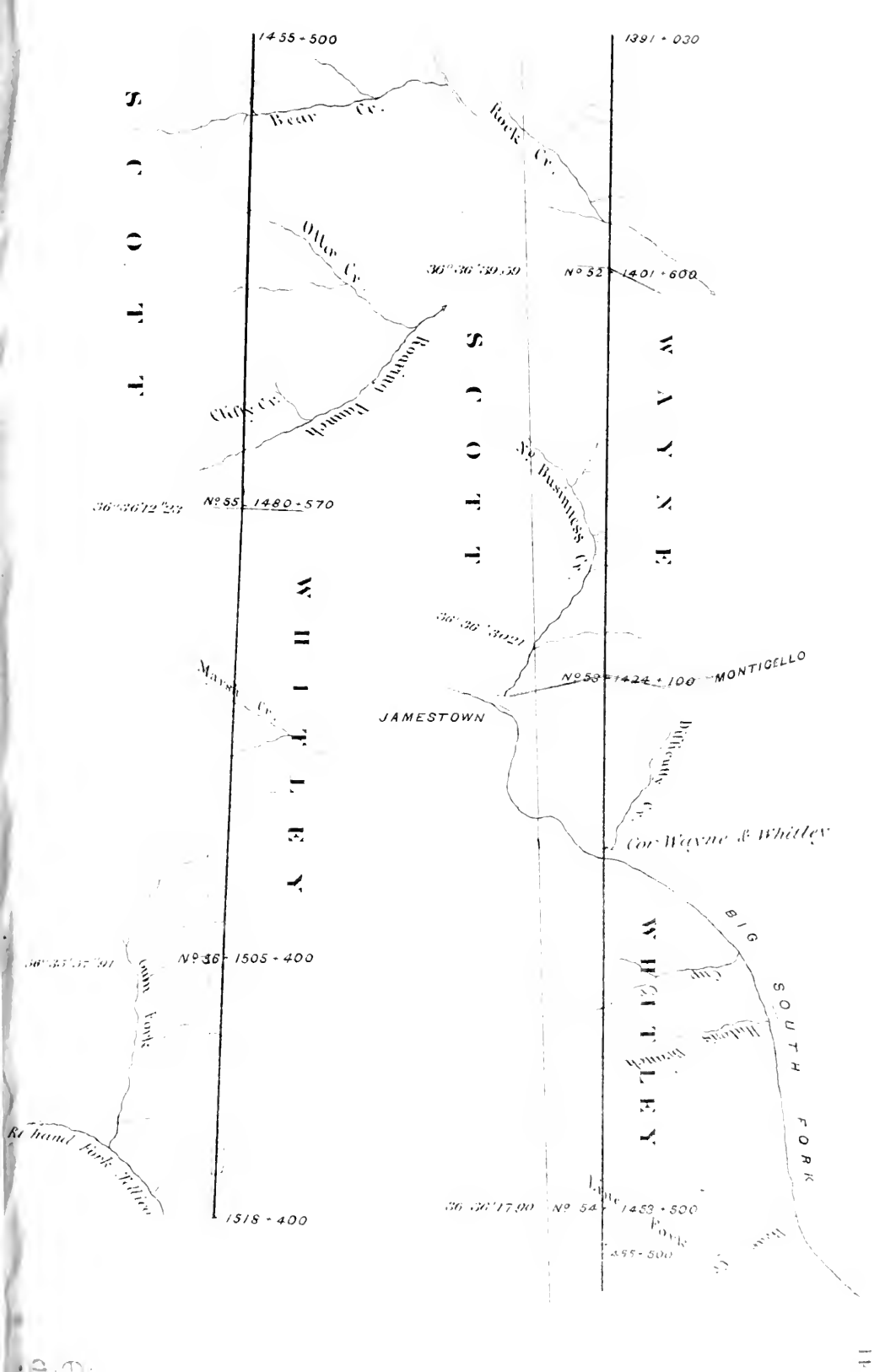
LATITUDE OBSERVATORY—CAMP NEAR BENJAMIN HARRISON'S.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Sept. 9	7923	S	15 9.14	----------	37	36.5	--------	------	29 29 28.50
	7948	N	12 16.50	— 3 7.99	37	37	+ 0.05	------	43 48 32.54
Sept. 9	7958	S	9 6.42	----------	--------	--------	--------	------	23 51 53.43
	8036	N	17 6.29	+ 7 9.87	--------	--------	+ 9.08	------	49 17 27.28
Sep-. 9	8058	N	21 56.40	----------	--------	--------	--------	------	45 37 54.69
	8097	S	10 41.30	+11 15.10	--------	--------	+ 7.08	------	27 29 13.98

OBSERVATIONS WITH ZENITH TELESCOPE.

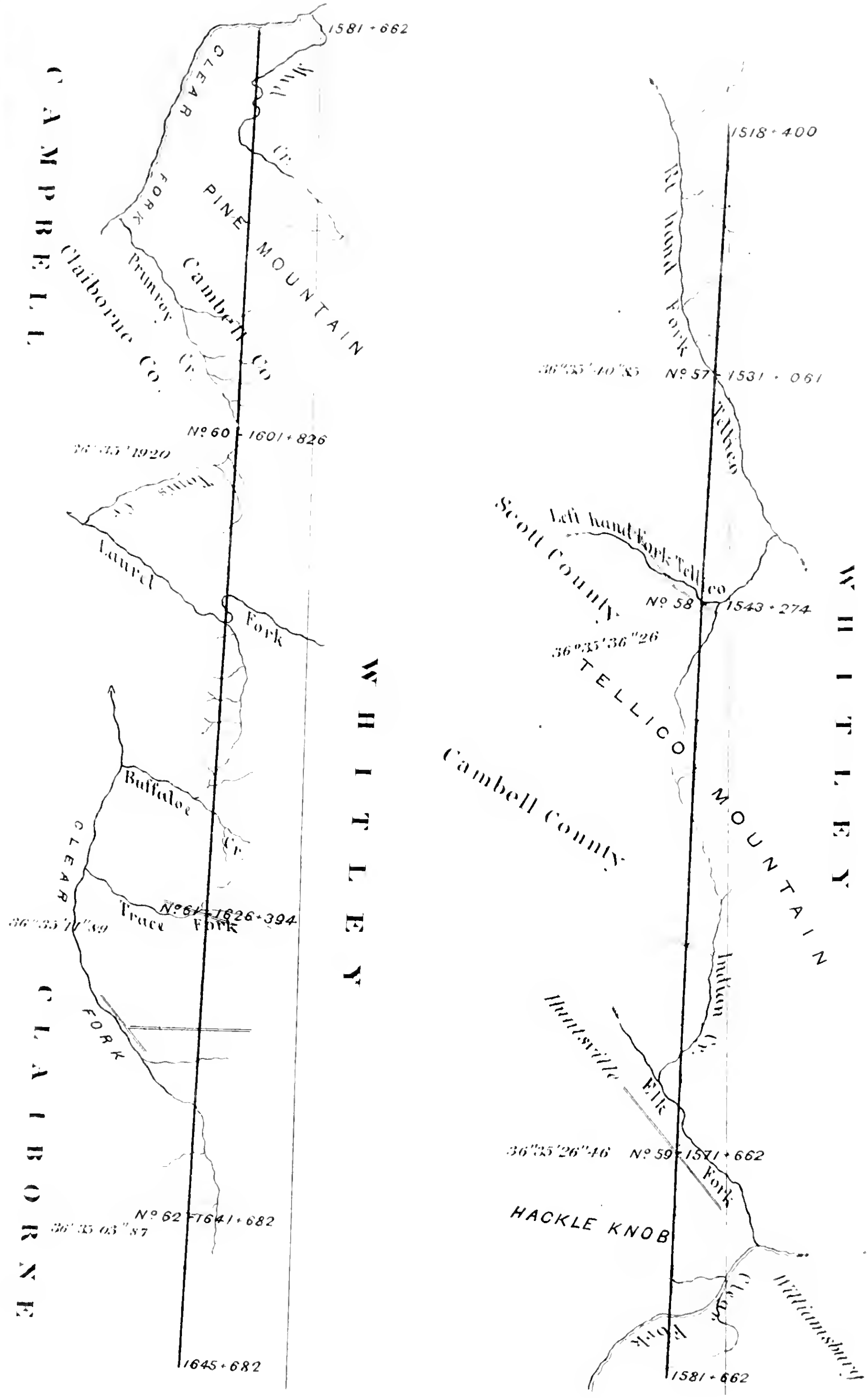
Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 18 06.04						
36 39 03.02	— 1 22.32	+0.12	—0.02	.....	36 37 38.30	
73 09 20.71						
36 34 40.36	+ 2 54.92	+2.33	+0.05	.....	37.66	
73 07 08.67						
36 33 34.33	+ 4 04.21	+1.85	+0.07	.....	40.46	
Mean of 17 observations					36 37 37.83	
Observatory north of the line					3.77	
Latitude of station 1275+938					36 37 34.06	

1401+600, at stone No. 52; thence S. 87° 30′ E., to station 1424+100, at stone No. 53; same course continued to station 1453+500, at stone No. 54; thence S. 89° 5′ E, to station 1474+000; thence S. 87° 40 E., to station 1480+570, at stone No. 55; thence S. 86° 40′ E., to station 1505+400, at stone No. 56; thence S. 89° 10′ E., to station 1521+100;


1455 + 500
1391 + 030
Bear Cr.
Rock Cr.
Otter Cr.
36°36'39.39
No 52 1401 + 600
Roaring Branch
Cliffe Cr.
No Business Cr.
36°36'12.23
No 55 1480 + 570
36°36'30.21
No 53 1424 + 100
MONTICELLO
JAMESTOWN
Marsh Cr.
Cor Wayne & Whitley
BIG
SOUTH FORK
36°35'57.91
No 56 1505 + 400
Rt hand fork Rattler
1518 + 400
36°36'17.90
No 54 1459 + 500
1395 + 500

Map No. 14.

thence S. 85° 10′ E., to station 1527+200; thence S. 86° 40′ E., to station 1531+061, stone No. 57; thence S. 87° 40′ E., passing stone No. 58, to station 1545+530; thence S. 88° 10′ E., to station 1557+186; thence S. 87° 15′ E., to station 1562+732; thence S. 88° E., to station 1567+150; thence S. 88° 15′ E., passing stone No. 59, to station 1588+290; thence N. 89° 15′ E., to station 1590+696; thence S. 88° 15′ E., passing stone No. 60, to station 1605+398; thence S. 88° 45′ E., to station 1610+550; thence S. 88° 15′ E., to station 1617+934; thence S. 88° E., to station 1625+094; thence S. 86° 50′ E., passing stone No. 61, to station 1641+682, at stone No. 62; thence S. 88° 50′ E.,



CAMPBELL
CLAIBORNE
WHITLEY
WHITLEY
Claiborne Co.
Cambell Co
Scott County
Cambell County
PINE MOUNTAIN
TELLICO MOUNTAIN
HACKLE KNOB
CLEAR FORK
Primroy Cr.
Laurel Fork
Buffaloe Cr.
Trace Fork
Tellico
Left hand Fork Tellico
Indian Cr.
Elk Fork
Huntsville
Williamsburg
Clear Fork
Rt hand Fork
No 57
No 58
No 59
No 60
No 61
No 62
1581 + 662
1601 + 826
1626 + 394
1641 + 682
1645 + 682
1518 + 400
1531 + 061
1543 + 274
1571 + 662
36°35'36"26
36°35'26"46

Map No. 15.

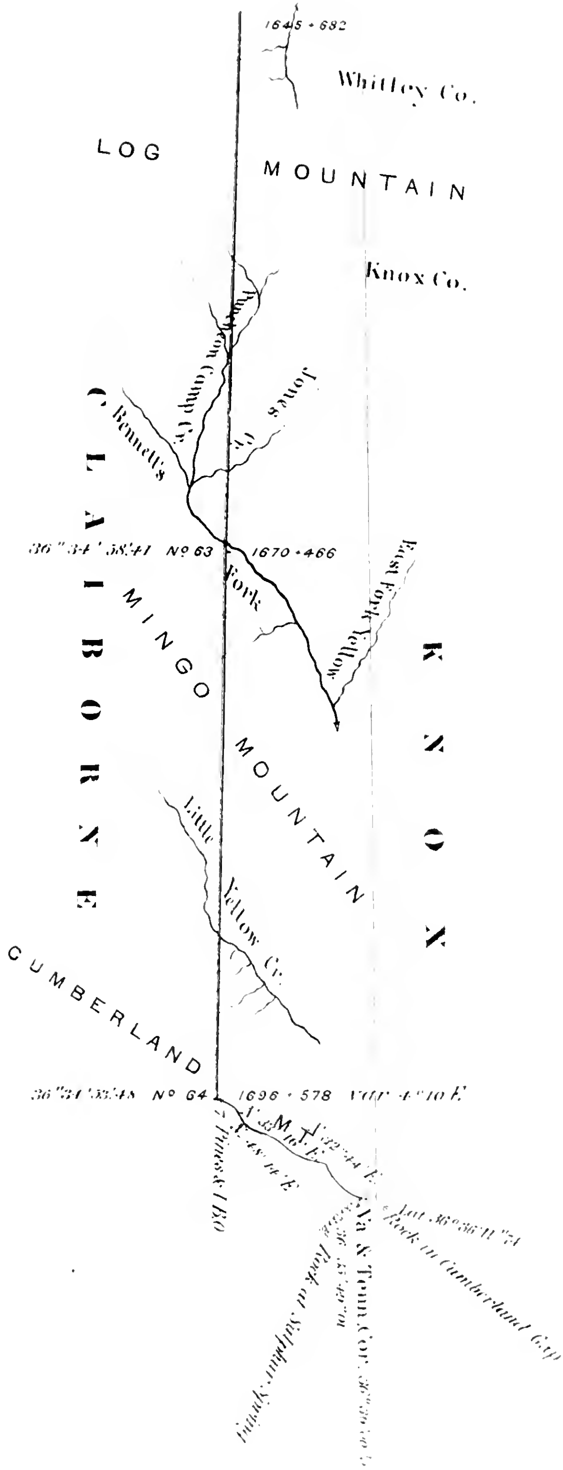
to station 1670+466, at stone No. 63; same course continued to station 1696+578, at stone at seven pines and two black-oaks, Tennessee and Kentucky corner; thence N. 33° 16′ E., 8309 feet, to Tennessee and Virginia corner, at stone at chestnut-oak, latitude 36° 36′ 06″.94. The line of boundary from the stone at seven pines to the stone at the Tennessee and Virginia corner, follows the backbone of Cumberland mountain.

From the stone in Cumberland Gap, latitude 36° 36′ 11″.74, to Virginia and Tennessee corner, is S. 28° 11′ W. 1200 feet.

From same stone to seven pines, is S. 32° 44′ W. 9510 feet.

From stone John G. Newlee's sulphur spring, in latitude 36° 35′ 49″.01, to Virginia and Tennessee corner, is N. 55° 35′ W.

From same stone to stone at seven pines, Tennessee and Kentucky corner, S. 48° 14′ W.


1645 + 682
Whitley Co.
LOG
MOUNTAIN
Knox Co.
Jones Cr.
Bennett's
Camp Cr.
CLAIBORNE
No 63
1670 + 466
Fork
East Fork Yellow
MINGO
MOUNTAIN
KNOX
Little
Yellow Cr.
CUMBERLAND
No 64
1696 + 578
Va & Tenn Cor.
Rock in Cumberland Gap
Rock at Sulphur Spring

Map No. 16.

LATITUDE OBSERVATORY—NEAR JCHN G. NEWLEE'S, CUMBERLAND GAP.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′ ″
Oct. 19	6737	N	5 9.10	----------	48	37	--------	68	63 07 36.64
	6772	S	22 9.90	—17 0.80	41.2	44.9	+ 7.3	------	10 16 36.91
	6805	S	5 3.20	+ 0.69	42	45.1	+ 7.9	------	10 04 10.76
Oct. 20	6737	N	8 23.10	----------	34.2	52.1			
	6772	S	25 13.20	—16 9.01	52.1	34.2	0	------	----------
	6805	S	8 7.10	+ 16	53	33.9	+ 1.2	------	----------
Oct. 19	6839	S	24 8.84	----------	45.1	41.2	--------	------	16 16 13.25
	6847	N	5 51.50	—19 36.90	48.8	37.1	+15.6	25	57 09 42.08
Oct. 20	6839	S	23 9.10	----------	37.9	49.1			
	6847	N	3 8.41	—19 24.90	54.9	32	+11.7	20	----------
Oct. 20	6944	S	18 37.40	----------	40.1	47.4	--------	------	26 04 01.50
	6983	N	5 41.90	—12 9.55	43.2	44.2	— 8.3	------	47 17 25.53
Oct. 20	7398	N	14 9.86	----------	57.4	32	--------	40	38 48 48.90
	7399	S	9 39.20	+ 5 5.94	53	47.1	+31.3	------	34 18 53.57
Oct. 20	7405	S	5 41.20	----------	42.4	47	--------	------	6 45 57.06
	7482	N	24 32.40	+18 9.12	48.1	41.4	+ 2.1	------	66 12 12.39
Oct. 18	7512	N	5 38	----------	41.1	48.9	--------	------	51 04 47.25
	7585	S	21 13.80	—15 7.58	53	38.1	+ 8.1	------	22 18 34.36
Oct. 19	7512	N	6 51.40	----------	49.1	41	--------	55	
	7585	S	22 54.10	—16 2.70	51.3	33.1	+26.3	------	----------
Oct. 20	7512	N	5 7.56	----------	41.3	48.3			
	7585	S	21 32.10	—15 56.50	49.1	40.3	+ 1.8	------	----------
Oct. 18	7923	S	17 9.95	----------	50.4	41	--------	46	29 29 38.12
	7948	N	8 9.55	— 9 4	41.1	50	+ 0.5	------	43 48 44.72
Oct. 19	7923	S	17 9.95	----------	45.1	46.2			
	7948	N	8 8.35	— 9 7.20	51.5	35.2	+15.2	------	----------
Oct. 20	7923	S	17 6.22	----------	45.1	51.2			
	7948	N	8 7.24	— 8 8.98	46.7	39.7	+ 0.8	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 24 13.55						Observatory 6278 feet north of the line. 6278 feet =1′ 2″.9.
36 42 06.77	— 6 12.48	+1.74	—0.12	+0.50	36 35 56.41	
73 11 47.40						
36 35 53.70	+ 0 01.51	+1.88			57.09	
	— 6 10.13	0	—0.12		56.62	
	+ 0 03.50	+0.28			57.48	
73 25 55.33						
36 42 57.66	— 7 04 18	+3.71	—0.13	+0.07	57.13	
	— 7 01.53	+2.65	—0.13		58.68	
73 21 27.03						
36 40 43.51	+ 4 43.71	—1.97	—0.07		57.76	
73 07 40 47						
36 33 50.23	+ 2 02.41	+7.43	+0.03	+0.21	61.31	
72 58 09.45						
36 29 04.72	+ 6 54.17	+0.50	+0.15		59.54	
73 23 21.61						
36 41 40.80	— 5 45.10	+1.90	—0.10		57.50	
	— 5 50.99	+6.25	—0.10	+0.40	56.36	
	— 5 40.87	+0.43	—0.10		60.26	
73 18 22.84						
36 39 11.42	— 3 17.98	—0.12	—0.05	+0.13	53.62	
	— 3 18.68	+3.01	—0.06		56.29	
	— 3 14.87	+2.33	—0.05		58.83	

LATITUDE OBSERVATORY—NEAR JOHN G. NEWLEES, CUMBERLAND GAP.

Date.	Star. No. B.A.C.	Star. N. S.	Micrometer. Reading.	Micrometer. Diff. Z. D.	Level. N.	Level. S.	Level. Diff. N.—S.	Meridian distance.	Declination.
1859.			′ ″	′ ″	″	″	″		° ′
Oct. 19	8034	S	11 8 40	----------	60.1	31.4	----------	------	14 27 20.28
	8054	N	17 18 50	+ 6 10.10	39.5	52.6	—15.06	------	58 40 01.93
Oct. 20	8034	S	10 7 99	----------	49.2	42.4			
	8054	N	17 13	+ 6 33.10	39	52.5	+ 6.07	------	----------
Oct. 18	8141	S	6 50 40	----------	49	42.1	----------	------	31 03 00.06
	8171	N	6 7 81	+ 0 27.70	44.2	45.1	+ 6.00	------	42 08 44.67
Oct. 19	8141	S	13 5 90	----------	54.5	38.5			
	8171	N	13 22 10	+ 0 16.20	42.4	49.9	+ 8.05	------	----------
Oct. 20	8141	S	12 18	----------	38.1	53.8			
	8171	N	12 55 30	+ 0 37.30	52.1	39.9	— 3.05	------	----------
Oct. 21	8141	S	11 30 10	----------	52	41			
	8171	N	11 41	+ 0 10.90	45.3	48	+ 8.03	------	----------
Oct. 18	8248	S	23 7 34	----------	45.2	44	----------	------	15 33 39.89
	8268	N	4 4	—19 6.94	42	48.1	— 4.09	------	57 52 32.24
Oct. 19	8248	S	24 14 10	----------	50	42.2			
	8268	N	4 42 20	—19 7.19	44.9	47.5	+ 5.02	------	----------
Oct. 20	8248	S	23 00 50	----------	43.1	49.2			
	8268	N	3 36	—19 6.45	47.2	44.8	— 3.07	------	----------
Oct. 18	8299	S	15 6 10	----------	46.8	43.1	----------	------	18 20 47.02
	8322	N	8 6 54	— 6 40.70	41.6	47	— 1.07	------	54 55 45.83
Oct. 19	8299	S	18 6 92	----------	49.1	43			
	8322	N	12 33	— 6 36.20	43	49	+ 0.01	------	----------
	8330	N	8 27 00	—10 42.20	43.5	48.8	+ 0.08	------	54 58 42.70
Oct. 20	8299	S	19 11 10	----------	51.4	40.2			
	8322	N	13 4 30	— 6 36.80	38.1	53.2	— 3.09	------	----------
	8322	N	8 9 95	—10 11.60	38.5	53.3	+ 3.06	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 07 22.21						
36 33 41.10	+ 2 13.16	+3.71	+0.04	.....	36 35 38.46	
.....	+ 2 18.65	—1.57	+0.04	.....	58.22	
73 11 44.73						
36 35 52.36	+ 0 06.07	+1.42	.....	.....	59.85	
.....	+ 0 03.45	+2.02	.....	.....	57.83	
.....	+ 0 08.57	—0.83	.....	.....	59.70	
.....	+ 0 02.39	+1.97	.....	.....	56.72	
73 26 12.13						
36 43 06.06	— 7 11.40	—1.14	—0.13	.....	53.39	
.....	— 7 11.85	+1 24	—0.13	.....	55.32	
.....	— 7 10.33	—0.88	—0.13	.....	54.72	
73 16 32.85						
36 38 16.42	— 2 20.31	+0.38	—0.04	.....	55.69	
.....	— 2 19.33	+0.02	—0.04	.....	57.06	
73 19 29.72						
36 39 44.86	— 3 48.24	+0.19	—0.08	.....	56.73	
.....	— 2 19.46	—0.93	+0.04	.....	56.99	
.....	— 3 48.11	—0.85	—0.07	.....	55.85	

LATITUDE OBSERVATORY—NEAR JOHN G. NEWLEE'S, CUMBERLAND GAP.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
	8344	N	19 42.10		47	45			60 26 47.32
Oct. 19				+10 7.71			+ 9.9		
	8366	N	11 9.82		44	48			60 32 14.13
	8370	S	8 6.50	+ 3 33.20	50	42.1	+ 3.9		12 37 13.25
	8344	N	19 6.90		47.2	44.9			
Oct. 20				+10 07.90			— 3.5		
	8366	N	12 19.90		47.5	44.9			
	8370	S	8 9	+ 3 29.90	43	48.8	— 3.2	28	
Oct. 18	18	N	12 25.60		46	43			58 53 49.95
	26	S	21 28.10	— 9 2.50	48	40.9	+10.1		14 24 28.89
Oct. 19	18	N	10 15		56.1	36			
	26	S	19 17.80	— 9 2.80	45.5	47	+18.3		
Oct. 20	18	N	9 6.07		54.1	37.3			
	26	S	18 51.50	— 8 9.08	38.5	53	+ 2.3		
Oct. 18	58	S	13 8.90		57	32.1			36 00 43.26
	67	N	12 8.10	— 1 8	44.2	45	+24.1		37 11 48.41
Oct. 19	58	S	13 20.70		49.4	43			
	67	N	12 11	— 1 9.70	55.1	37	+24.5		
Oct. 20	58	S	12 6.90		47.5	44.4		52	
	67	N	11 6.30	— 1 6	48.5	43.5	+ 8.1		
Oct. 18	121	N	3 8.08		38.9	50			53 45 07.86
	130	S	10 6.71	— 6 8.63	53	36	+ 3.9		19 31 32.69
Oct. 19	121	N	4 14.60		46.8	45.2			
	130	S	11 9	— 6 9.44	82	21	+62.6		
Oct. 20	121	N	5 15		41.2	51.4			
	130	S	11 8.18	— 6 6.64	57	35.8	+11		
Oct. 19	201	N	10 35.70		45	47.9			54 27 23.69
	214	S	16 47.10	— 6 11.80	46.5	45	— 1.4		18 48 51.25
Oct. 20	201	N	10 17.20		40.4	52.2			
	214	S	16 40.10	— 6 22.90	56.1	36.5	+ 7.8		

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 04 00.59						
36 32 00.28	+ 3 55.86	+ 2.35	+0.08	.....	36 35 58.57	
73 09 27.38						
36 34 43.69	+ 1 12.87	+ 0.93	+0.02	.....	57.57	
.....	+ 3 56.30	— 0.83	+0.08	.....	55.83	
.....	+ 1 12.25	— 0.76	+0.03	+0.05	55.26	
73 18 18.84						
36 39 09.42	— 3 17.64	+ 2.41	—0.06	.....	54.13	
.....	— 3 17.71	+ 4.42	—0.06	.....	56.06	
.....	— 3 15.09	+ 0.55	—0.07	.....	54.81	
73 12 31.67						
36 36 15.83	— 0 23.65	+ 5.72	—0.01	.....	57.89	
.....	— 0 23.92	+ 5.82	—0.01	.....	57.72	
.....	— 0 23.21	+ 1.92	—0.01	+0.33	54.86	
73 16 40.55						
36 38 20.27	— 2 30.30	+ 0.92	—0.05	.....	50.84	
.....	— 2 32.07	+14.87	—0.05	.....	.....	Level disturbed. Rejected.
.....	— 2 26.03	+ 2.61	—0.05	.....	56.80	
73 16 21.94						
36 38 10.97	— 2 13.90	— 0.33	—0.04	.....	56.70	
.....	— 2 16.42	+ 1.85	—0.01	.....	56.36	

LATITUDE OBSERVATORY—NEAR JOHN G. NEWLEE'S, CUMBERLAND GAP.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Oct. 18	269	S	19 6.30	----------	30.2	60.1	--------	------	12 56 25.27
	282	N	13 8.60	— 5 7.70	66.0	24.0	+12.1	------	60 19 24.61
Oct. 19	239	N	10 26.40	----------	50.1	42.0	--------	------	60 21 23.40
	269	S	18 6.25	— 8 36.10	42.5	50.1	+ 0.5	------	----------
	282	N	13 18.50	— 5 44	46.0	47.0	—10.6	------	----------
Oct. 18	535	N	11 5.50	----------	46.5	46.2	--------	------	63 09 50.90
	542	S	20 34.10	— 9 28.60	58.0	35.0	+23.3	------	10 08 39.06
Oct. 20	535	N	9 8.91	----------	47.3	47.0			
	542	S	19 5.60	— 9 16.50	49.5	45.4	— 4.4	20.0	----------
Oct. 19	535	N	8 55.80	----------	48.9	44.5			
	542	S	17 6.65	— 9 10.70	42.0	51.9	— 5.5	37.0	----------
Oct. 20	239	N	10 15.90	----------	42.5	50.1			
	269	S	18 46.90	— 8 31	50.0	42.4	--------	------	----------
	282	N	12 9.49	— 5 52	43.0	50.0	+ 0.6	------	----------
Oct. 18	558	N	18 7.74	----------	51.4	41.0	--------	------	54 27 13.18
	572	S	7 9.95	+10 7.79	56.1	36.2	+30.3	20.0	18 36 30.03
	573	S	8 1.40	+10 7.60	56.1	36.2	+30.3	------	18 36 38.60
Oct. 19	558	N	19 9.90	----------	39.8	54.0			
	572	S	8 8.50	+11 1.40	57.7	35.6	+ 7.9	------	----------
	573	S	8 45.80	+10 6.41	57.7	35.6	+ 7.9	23.0	----------
Oct. 20	558	N	18 8.47	----------	51.1	44.4			
	572	S	7 8.11	+11 3.60	44.0	51.5	— 0.7	------	----------
	573	S	8 7.40	+10 7.73	44.0	51.5	— 0.7	20.0	----------
Oct. 18	692	S	20 8.92	----------	66.1	27.3	--------	------	25 07 55.53
	705	N	6.45	—20 24.70	43.3	49.1	+33.0	------	48 18 24.26

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″	″	° ′ ″	
73 15 49.88						
36 37 54.94	— 2 06.36	+2.87	—0.04	.....	36 35 51.41	
73 17 48.67						
36 38 54.33	— 3 03.11	+0.13	—0.06	.....	51.59	
.....	— 1 59.14	—2.52	—0.40	.....	53.24	
73 18 29.96						
36 39 14.98	— 3 23.37	+5.53	—0.06	.....	57.08	
.....	— 3 20.71	—1.05	—0.07	+0.02	55.27	
.....	— 3 20.44	—1.31	—0.07	+0.06	53.22	
.....	— 3 01.99	.....	—0.60	.....	52.28	
.....	— 2 00.99	+0.14	—0.04	.....	54.05	
73 03 43.21						
36 31 51.60	+ 3 56.06	+7.20	+0.08	+0.02	54.96	
73 03 51.78						
36 31 55.89	+ 3 55.65	+7.20	+0.08	.....	58.82	
.....	+ 4 01.21	+1.88	+0.08	.....	53.77	
.....	+ 4 03.04	+1.88	+0.08	+0.04	59.93	
.....	— 4 01.69	+0.17	+0.08	.....	53.20	
.....	— 3 59.29	+0.17	+0.08	+0.03	55.12	
73 26 19.79						
36 43 09.89	— 7 23.41	+7.84	—0.13	.....	54.19	

LATITUDE OBSERVATORY—NEAR JOHN G. NEWLEE'S, CUMBERLAND GAP.

Date.	Star.		Micrometer.		Level.			Meridian distance.	Declination.
	No. B.A.C.	N. S.	Reading.	Diff. Z. D.	N.	S.	Diff. N.—S.		
1859.			′ ″	′ ″	″	″	″		° ′ ″
Oct. 19	692	N	20 7.80	----------	51.4	42.4	--------	------	25 07 55.53
	705	S	0 9.24	—19 8.56	36.1	57	—11.09	------	48 18 24.26
Oct. 20	692	S	20 7	----------	34.8	61			
	705	N	0 6.51	—20 6.90	58.4	37	— 4.08	------	----------
Oct. 18	721	N	2 6.30	—22 52.60	27.4	65	--------	------	55 12 22.95
	782	S	25 15.60	----------	82	20	+24.04	------	18 15 47.22
Oct. 19	721	N	1 5.10	----------	51	42.1			
	782	S	23 19.30	—22 14.20	39.7	53.2	— 4.06	------	----------
Oct. 20	721	N	2 6.08	----------	46.8	48.9			
	782	S	24 6.95	—22 8.70	45.5	50.2	— 6.08	------	----------
Oct. 18	913	N	8 27.80	----------	45	48.5	--------	------	20 06 20.02
	947	S	19 23	+10 9.52	52.1	40.8	+ 7.08	------	52 57 19.00
Oct. 19	913	S	7 6.62	----------	45.5	48.2			
	447	N	18 9.01	+11 23.90	44	52.2	+ 0.09	------	----------
Oct. 20	913	S	8 5.50	----------	51.6	44			
	947	N	19 14.20	+11 8.70	43	52.5	— 1.09	------	----------
Oct. 18	957	S	23 9.71	----------	57	36.8	--------	------	24 42 32.28
	1024	N	17 48.10	— 6 49	41	51.8	+ 9.04	------	48 35 52.07
	----	----	--------	----------	--------	--------	--------	------	----------
	1035	N	5 54.50	—18 42.60	40.5	52.1	+ 8.06	------	48 42 30.94
Oct. 20	957	S	23 9.53	----------	52.2	43			
	1024	N	17 58.40	— 6 36.70	44.4	51	+ 2.06	------	----------
	1035	N	5 6.17	—18 33.60	44	51.5	+ 1.07	------	----------
Oct. 18	1052	S	16 32.50	----------	43	49.8	--------	45	24 13 33.44
	1066	N	11 8.10	— 4 51.50	57	35.8	+14.04	------	49 01 13.82
Oct. 19	1052	S	16 10.90	----------	45	48.2			
	1066	N	11 9.17	— 4 19.20	47.5	45	— 0.07	------	----------
Oct. 20	1052	S	15 47.90	----------	51	44.4			
	1066	N	11 24.90	— 4 23	44	50.2	+ 0.04	------	----------

OBSERVATIONS WITH ZENITH TELESCOPE.

Sum and half sum.	Corrections.				Reductions.	Remarks.
	Micrometer.	Level.	Refr.	Meridian	Latitude.	
° ′ ″	′ ″	″	″		° ′ ″	
73 26 19.79						
36 43 09.89	— 7 16.85	—2.83	—0.13	.....	36 35 50.10	
.....	— 7 19.51	—1.14	—0.13	.....	49.11	
73 28 10.17						
36 44 05.08	— 8 13.32	+5.80	—0.15	.....	57.31	
.....	— 8 04.91	—1.09	—0.15	.....	58.93	
.....	— 8 03.71	—1.62	—0.15	.....	59.60	
73 03 39.02						
36 31 49.51	+ 3 59.85	+1.85	+0.08	.....	51.29	
.....	+ 4 06.13	—0.21	+0.08	.....	55.51	
.....	+ 4 02.81	—0.45	+0.08	.....	51.95	
73 16 24.35						
36 38 12.17	— 2 21.81	+2.23	—0.04	.....	53.05	
73 25 03.22						
36 42 31.61	— 6 43.53	+2.04	—0.07	.....	50.05	
.....	— 2 19.44	+0.62	—0.04	.....	53.31	
.....	— 6 41.56	+0.40	—0.04	.....	50.28	
73 14 47.26						
36 37 23.63	— 1 38.78	+3.42	—0.03	+0.03	53.27	
.....	— 1 31.80	—0.17	—0.03	.....	51.63	
.....	— 1 32.64	+0.10	—0.03	.....	50.06	
Mean of 73 observations.....					36 35 55.57	
Observatory north of seven pines.....					1 02.09	
Latitude of seven pines, &c.....					36 34 53.48	

We have had run and marked every foot of the line, from its western terminus on the Mississippi river, to its eastern one on Cumberland mountain, at the seven pines and two black-oaks, where we placed a small stone —a large one can scarcely be gotten to this point, because of the steepness of the mountain. We then ran along its apex to the Tennessee and Virginia corner, a chestnut-oak, where we placed another small stone; and continuing along the mountain top to Cumberland Gap, and placed a large stone where the old Wilderness road, leading into Virginia, diverges from the one leading down Powell's valley, and across to Bean's station. We had engraved upon it, on the

West side.

B. Magofein, Governor Kentucky.
T. B. Monroe, Jr., Secretary.
S. 32° 44′ W., 9510 feet to stone at seven pines and two black-oaks, Kentucky and Tennessee corner.

East side.

J. G. Harris, Governor Tennessee.
J. E. R. Ray, Secretary.
S. 28° 14′ W., 1200 feet to stone at chestnut-oak, Tennessee and Virginia corner.

North side.

A. P. Cox, C. M. Briggs, } Commissioners.
G. Trafton, Engineer.
H. W. Dulany, H. C. Hines, W. E. Cox, C. G. Graham, } C. C. and F. M.
H. Loving, Commissary.

South side.

B. Peeples, O. R. Watkins, } Commissioners.
O. H. P. Bennet, Engineer.
L. Burnett, Assistant.
W. J. Oldham, A. Cummins, } F. M.
B. P. McIntosh, J. D. Baker, } C. C.
J. R. Peeples, Marker.

Most of the pines, and both oaks, southeast corner of Kentucky, are gone—have rotted down; and inasmuch as you cannot run a direct line from the stone placed in the gap, to said corners on the mountain, we placed another near a sulphur spring, on the land of Mr. John G. Newlee, as a pointer to both, engraving upon it, "S. 48° 14′ W., to stone at seven pines and two black-oaks, Ky. and Tenn. corner," and "N. 55° 35′ W., to stone at chestnut oak, Tenn. and Va. corner," on the Kentucky line. By observing of these inscriptions, any one sufficiently active and muscular can find either with a pocket compass.

We had a path cut on the whole line where necessary, removing all trees and bushes, and everything else, so as to give an unobstructed view through the telescope of the transit. Trees north or south, and within five feet of this line, were marked with four chops, fore and aft. Those on the north had K, those on the south T, cut in the bark, representing Kentucky and Tennessee, and each facing the line.

We have endeavored to serve the States which trusted us, with honesty, fidelity, and industry, and with such ability as God has given us. We have worked and labored as some of us have never worked and labored

before. We had undertaken to settle a dispute of long standing between two great Commonwealths—a dispute which they had inherited from their parent States, and they from those who held under the monarchs of Great Britain—and we very much disliked to turn back when troubles and difficulties intervened—troubles that arose not only from the infirmity of poor human nature, but from physical causes that met us on every side, on a very considerable portion of the line.

We have had run and marked the entire line from one end to the other, omitting no part of it; leaving, as we confidently believe, nothing undone required of us by law. We have gone over the whole ground, examined every portion of the line, finished the work, and made, as we sincerely hope, a finality of it. If, indeed, we have done so much, we may be excused for feeling proud of it. Abler men have tried it, and only made confusion worse confounded. Some degree of credit may also be awarded us, if for nothing else, for perseverance under difficulties neither few or trivial, and successfully carrying through a line where all others had failed.

Many, very many, thousands of dollars have been expended to have this line of boundary and separation settled and established forever; and the whole matter in dispute, in the year eighteen hundred and fifty-eight, was in a greater state of confusion, more unsettled, and less likely to be settled amicably, than it had been at any period subsequent to the execution of the compact between the two States, and still getting worse, and would probably have continued to get worse for all coming time, as the older men died who may have had some knowledge touching the matters we have had under consideration, and canvassed from day to day as we passed along the line.

The precise position of the line was fixed in the minds of those living and owning lands on it, at, comparatively speaking, very few points, and only where clever, intelligent, amicably disposed gentlemen resided on each side. Along the southern borders of Christian, Todd, and Logan counties, Kentucky, and northern borders of Montgomery and Robertson counties, Tennessee; or, rather from the one hundred to the one hundred and sixtieth mile-stone, the land is remarkably good—no one needs or desires better; many of the farmers own on both sides of the line, and care, individually, very little about its exact position. Our line will enable the two States to exercise jurisdiction over their entire territory, and collect taxes upon all the land within the borders of either. East of Cumberland river, in the mountains, where there are, or ought to be, something near a dozen county corners, the settlers on or near the line could show us none. They knew that they were said to be in certain localities, but where, exactly, they could not say. They neither knew the county or State they lived in.

It is doubtful whether many of these county corners were ever fixed and marked, for want of knowledge in regard to the position of the State line. Our five-mile stones will enable surveyors and others to remedy this evil, and give permanency to the line. In a short time any one can determine its position at any given point; and thus our citizens can have public offenders against the laws of either State punished, by indictment and trial in the State where the offense was committed, which is far, very far, from having been the case heretofore. Persons on the line understood that it ran by certain farms—that this man lived in Tennessee, and that in Kentucky; but we doubt exceedingly whether there was a solitary mile on the whole line where a murder might not have been committed, and men of intelligence and acknowledged integrity would not have sworn, some that it was committed in Tennessee, others, that it was in Kentucky; and thus, in many cases, a murderer goes unwhipt of justice. Our line will make it easy to settle all such difficulties, and give to the honest portion of the community an opportunity of having punished thieves, counterfeiters, murderers, and public offenders of every grade.

We have been a long time, several months, almost a year, on the line, and have been several weeks bringing up the notes, and reducing the angles and astronomical observations, preparatory to making out this report. It may appear unnecessarily long to those unacquainted with the country over which we have run the line—the difficulties encountered and overcome at many points—and the kind of service rendered; it appears especially long to those of us who had wives, children, and friends at home, and debarred their society all this while; and yet more especially does it appear long to men who have exchanged the comforts of the family circle, and the pleasures of social intercourse, for the companionship of beasts of prey, venomous serpents, and vile creeping things without number, as was the case with us on more than one third of the line.

Should the two States approve of what we have done, and establish the line we have had run, we respectfully suggest the propriety of each passing a law, providing that the title of individuals to lands shall not be affected by it, but remain as though we had not run it, and they had not approved of it.

We think it our duty, and it is one which we perform with much pleasure, to say of the members of the two corps under our charge, without naming or particularizing any individual, that they have performed cheerfully, willingly, and industriously, every duty imposed on them, in the several positions each occupied. They have cut their way through heavy canebrakes for miles; they have waded through mud, mire, swamps, ponds, and lakes, where the water was from a few inches to more than two feet deep, breaking, as they went along, ice near an inch thick; they have groped

their way through brambles and thickets, and over miles of sharp, flinty stone, that tore their apparel to pieces in a very short time; they have clambered over hills and mountains, from a few hundred to near two thousand feet high; and they have scaled and mounted over cliffs, to the manifest danger of life and limb, whose tops reached above the lower clouds. They knew of our determination to run, not only so much of the line as had been run heretofore, but to run the whole line, as it never had been run; and hence they were always ready to work when we called them—went at it willingly and without grumbling. To them much, we will say most, of the credit is due for our having been able to carry a line successfully through and finish it, which no one has ever done before, although charged with the doing of it. Two sets of commissioners had tried the bottoms of the Mississippi river, including Reelfoot lake, and the numerous swamps, ponds, and bayous appurtenant thereto, and had failed to run and mark several miles of it. Another set had tried the mountains, and also failed. We have run the whole, omitting no part of it, and now wish to acknowledge in a public manner, freely, fully, and frankly, that for having been able to do this, great credit is due to the working men of each corps. It will, of course, be understood that all this is said by the commissioners of their respective corps; but each approve of all that is said.

We give below the names of the two corps; their time of service; their daily or monthly pay; the sum earned by each; the sum paid to each, and now due to each:

THE KENTUCKY CORPS.

NAMES.	Days.	Months.	Pay per day or month.	Amount earned.	Amount paid.	Amount due.
Austin P. Cox, commissioner	------	13	$350	$4,550 00	$49 85	$4,500 15
C. M. Briggs, commissioner	------	12 1/4	350	4,287 50	----------	4,287 50
J. Pilsbury, engineer	------	7	300	2,100 00	----------	2,100 00
G. Trafton, engineer	------	4 5-6	300	1,450 00	6 00	1,444 00
Geo. Stealey, ass't engineer	12	------	5	60 00	53 75	6 25
A. Hensley, ass't engineer	------	7 1/4	200	1,450 00	----------	1,450 00
W. E. Cox,	298	------	2	596 00	----------	596 00
M. P. Brown, f. m.	168	------	2	336 00	4 25	331 75
H. C. Hines, and	148	------	2	296 00	----------	296 00
H. W. Dulaney, c. c.	310	------	2	620 00	15 50	604 50
C. G. Graham,	298	------	2	596 00	12 55	583 45
J. Cox, commissary	154	------	2 1/2	385 00	385 00	
J. P. Wooten, ass't commissary	127	------	2	254 00	5 75	248 25
T. Manning, axman	152	------	1	152 00	35 50	116 50
W. Loving, axman	------	5	20	100 00	----------	100 00
T. Talbut, axman	92	------	1	92 00	12 50	79 50
M. Grider, axman	143	------	1 1/4	178 75	14 40	164 35
G. Willis, axman	40	------	1	40 00	----------	40 00
W. Briggs, wagoner	------	5 2/3	25	141 00	4 75	136 25
W. Loving, wagoner	------	5	------	100 00	----------	100 00
T. Cook, cook	308	------	1	308 00	17 75	290 25
H. Loving, com'y	------	11 1/4	40	450 00	----------	450 00
S. Jones, ass't	------	4 2/3	20	93 00	6 25	86 95
				$18,635 25	$623 80	$18,011 45
The State of Kentucky owe Mr. Stanley for stone	------	------	------	845 00	----------	845 00
The Kentucky corps have paid for subsistence, &c., &c.	------	------	------	4,137 32	4,137 32	
				$23,617 57	$4,761 12	$17,748 95

THE TENNESSEE CORPS.

NAMES.	Days	Months	Pay per day or month.	Amount earned.	Amount paid.	Amount due.
B. Peeples, commissioner		$12\frac{2}{3}$	$350	$4,433 33		$4,433 33
O. R. Watkins, commissioner		$12\frac{2}{3}$	350	4,433 33		4,433 33
O. H. P. Bennet, engineer		$11\frac{2}{3}$	300	3,500 00	$472 83	3,027 17
G. Trafton, ass't engineer		$7\frac{1}{2}$	200	1,500 00	34 00	1,466 00
L. Burnett, ass't engineer		$3\frac{1}{2}$	200	700 00	20 00	680 00
J. M. Nicholson, surveyor	32		3	96 00	96 00	
T. G. Randle, commissary	89		$2\frac{1}{2}$	222 50	42 72	179 78
R. G. Kirby, commissary	82		$2\frac{1}{2}$	205 00	66 28	138 72
J. R. Peeples, marker	349		2	698 00		698 00
W. J. Oldham, f. m.	311		2	622 00	88 90	533 10
J. E. Ray, f. m.	227		2	454 00	94 00	360 00
A. Cummins, f. m.	74		2	148 00	10 05	137 95
J. D. Baker, c. c.	262		2	524 00	116 90	407 10
B. P. McIntosh, c. c.	270		2	540 00	70 46	469 54
N. Campbell, cook	325		$1\frac{1}{2}$	487 50	99 55	387 95
J. Smith, axman	311		1	311 00	23 12	287 88
D. Foster, axman	235		1	235 00	16 75	453 25
J. Foster, wagoner	235		1	235 00		
H. Milam, wagoner	251		1	251 00	2 50	248 50
E. J. Willis, ass't commissary	4		2	8 00	8 00	
				$19,603 66	$1,262 06	$18,341 60
The State of Tennessee owe Mr. Stanley for stone				420 00		420 00
The Tennessee corps have paid for subsistence, &c.				5,333 34	4,701 61	631 73
				$25,357 00	$5,963 67	$19,393 33

John R. Peeples served as marker for both corps for six months, or one hundred and eighty-three days, at two dollars per day; the half of which, or $183, was due from Kentucky. The Tennessee Commissioners assume to pay the whole, and Kentucky pays that much more to Mr. Stanley. Kentucky was also indebted to Tennessee, on joint account, upon settlement, in the sum of $29 50, which she also pays Mr. Stanley.

We owe Mr. S., for putting in stone posts, the sum of	$1,265 00
One half of which, due by each State, is	$632 50
Add one half of J. R. Peeples' per diem	183 00
Also, what is due Tennessee upon settlement of joint account referred to above	29 50
Due from Kentucky	$845 00
Due from Tennessee	420 00

RECAPITULATION.

The boundary line survey has cost Kentucky, for wages of corps	$18,635 25
For subsistence, transportation, &c.	4,137 32
To Mr. Stanley, for stone	845 00
	$23,617 57
Of which there is paid	4,761 12
	$18,856 45
Add amount advanced by Commissioners	1,761 12
Now due	$20,617 57
The boundary line survey has cost Tennessee, for wages of corps	$19,603 66
For subsistence, &c.	5,333 34
To Mr. Stanley, for stone	420 00
	$25,361 00
Of which there is paid	5,963 67
Now due	$19,393 33

We have passed over sections of country where the people were dying in numbers sufficient to attract not only the observation of residents, but of strangers. We have run over the line—the whole line—from one end to the other, and through a country where diseases must prevail every year to a considerable extent. We have run it all unscathed and unharmed seriously; we have had a few, very few, cases of chills, which were easily managed. We had another case, in the person of Mr. J. P. Wooten, assistant commissary of the Kentucky corps, who came to the line through a long continued damp, rainy spell of weather, in delicate health, which did not improve, but rather got worse, until early in April he was compelled to leave for his father's house, and a sick bed, which he scarcely left but for the grave.

For all these mercies, continued to us from day to day, and not intermitted a single moment—for having guided us on our way hitherward, and for having guarded us "from the pestilence that walketh in darkness, and the destruction that wasteth at noonday," we desire in our own names, and the names of the corps under our charge, to render our sincere and heartfelt thanks to the Great Almighty Ruler and Father of us all.

Done in duplicate, and signed this 11th day of November, 1859.

AUSTIN P. COX,
C. M. BRIGGS,
Kentucky Commissioners.
BENJAMIN PEEPLES,
O. R. WATKINS,
Tennessee Commissioners.